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AN ILLINOIS ELEVATOR AND FEED MILL.

Stark County is one of the smaller counties of Illinois. It contains only 290 square miles of land and about 10,000 population. It has no large towns, Toulon, the county seat, containing only about 1,000 people in 1890, and Wyoming, the largest town, only about 1,100. It may, therefore, be put down as one of the strictly agricultural counties of the state, with Peoria as the nearest direct market, but with competing roads which may bring Chicago also in as a competing market. In such a county there will be in a succession of seasons about a given amount of grain to be handled every year; and naturally the business of the elevator man has been reduced to a permanent system. The elevators are good ones, and the service rendered by them to the farmers is generally recognized by them as one necessary to their own prosperity and convenience.

Our illustration of the elevator and feed mill of Coles Bros. at Toulon is the picture of a plant of rather more than common usefulness to a farming community not generally supplied with the mechanical conveniences found in most larger communities, in that it not only takes care of the farmer's grain, but supplies him with feed, or grinds his feed grain for him.

The elevator is a modern building, built of 2x4's and cribbed with 2x6's on the front above the loading spouts. It is 24x64 feet in size, and 43 feet high to the corner plate. It has a capacity for 50,000 bushels. The interior is well designed. All the upper bins can be emptied clean into cars by gravity, while the lower, or storage, bins are emptied by the elevators. A direct spout runs from the eave, down on the outside of the building, giving fall enough to load a car of oats complete without shoveling. Thus the great bête noir of the elevator employer is removed. There are two dumps and two stands of

elevators for shelled grain, and a third dump for ear corn. At the bottom of this dump is a No. 2 Victor Corn Sheller, built by Barnard & Leas Mfg. Co. of Moline, Ill. After shelling the corn is elevated to the top of the mill, which is annexed to

built by The Foos Mfg. Co. of Springfield, Ohio. Power for the entire plant is furnished by a Webster Gasoline Engine, the power being transferred from engine to elevator drives by rope transmission system. The machinery throughout was furnished by the Webster Mfg. Co., Chicago; while the construction of the building was in the hands of A. Price of Galva, Ill., who built the entire plant in 44 days. Messrs. Coles Bros. are doing a nice, comfortable business, and their relations with their farmer patrons are cordial and friendly.

SPECULATION.

In a recent market report of C. A. King & Co. of Toledo are some excellent remarks about speculation in general, coupled with sound advice, which will bear repetition: "Everybody is trying to guess the future. It is so from the cradle to the grave. Manufacturers, jobbers and retailers all try to anticipate their trade. Farmers try to raise that which they think will command the most. Skilled labor follows the trade it thinks will prove the most advantageous. Capital seeks investment where it thinks the future is the brightest and safest. As the country becomes developed, competition increases in all branches and profits are reduced. Large profits are only made by those who speculate successfully.

"A good rule is to speculate only in your regular business. That is what you are supposed to know the most about. Some try real estate. It's frequently slow. Some try Wall Street bonds and stocks, but most of them represent too much 'good will,' and

are rather easily manipulated. Nothing presents a more attractive field for legitimate speculation than the grain markets. You can get in or out any day you please. You can trade freely on a limited margin. The values are regulated by the supply and demand of the world. Some country is harvesting almost every month in the year. Interesting conditions are almost constantly arising.



AN ILLINOIS ELEVATOR AND FEED MILL.

the elevator, where it is separated and cleaned by a Cornwall Corn Cleaner, also built by Barnard & Leas Mfg. Co.

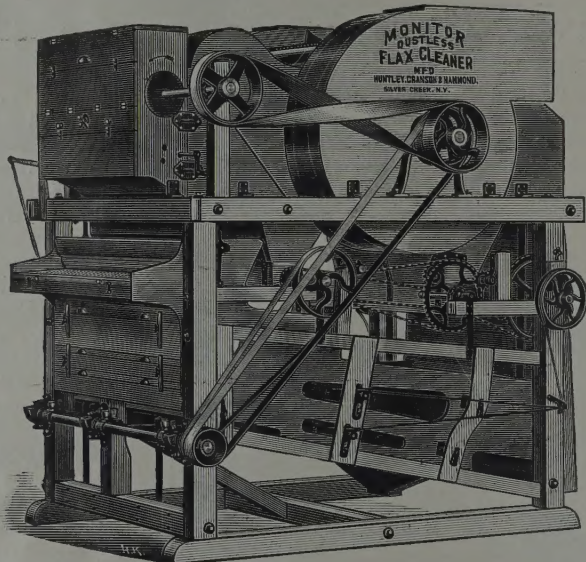
The feed mill, shown at the right of the picture, is 24x28 feet in size and 22 feet high. It is prepared to grind feed and fine meal, and is equipped with a 6-roll feed mill and bolter built by Barnard & Leas Mfg. Co. and one Scientific Corn Grinder

"Our advice is don't speculate unless you can afford to lose. Start with homeopathic doses. Limit your losses, don't be a mule. Better be a live coward than a dead hero like Leiter. Accept fair profits, don't be a hog. You cannot make a fortune this season on one deal. Don't trade every day. Try it only occasionally when the situation looks very favorable.

"If you wish to speculate, first select some responsible and desirable broker. Beware of gold bricks and 'sure thing' tips. There are plenty of good firms in every Board of Trade. Don't trust strangers before you investigate. Consult Dun or Bradstreet's."

FARMING ON A POSTAGE STAMP.

It is rather too much to expect a great deal of high art on a postage stamp; but there are utilitarian, matter-of-fact folks who would go so far as to insist that even postage-stamp art ought to be "true to nature." And so they—that is, a correspondent of the Farm Implement News does—register the complaint that the new 2-cent stamp issued in honor of the Omaha Exposition is "away off" in various ways. In the first place, our complainant says, the attempt to picture bonanza farm-



MONITOR FLAX CLEANER.

ing as "Farming in the West" is all wrong; which is true enough, because it is not the few big farms, but rather the many small ones, that make the real "Farming in the West." In the second place our kicker complains that the artist who drew the picture apparently had never been "out West" to see a plow at work, for he has pictured an out-of-date and superannuated model that is now almost entirely out of use, if indeed, it ever was in extensive service at all; while last, but by no means least, this idea of the artist of picturing the farmer of the West sitting on a plow, replendent in "biled" shirt, creased pants and a 10-cent paste-polish on his tan shoes, is too, too much. Our critic clearly is unimaginative; he wants his art manufactured with a \$5 camera, and seems to have no patience with impressionism and all that sort of thing. Why he even says that, "Doubtless, with the aid of a powerful microscope we could find a sparkling diamond on his bosom, and a satin tie around his neck." In view of the confoundedly independent position the western farmer has assumed on the matter of selling his new wheat about this time, there is, indeed, a well founded suspicion that he is wearing diamonds somewhere about his person.

As a wheat story, the experience of the Hamlett Hay Company of Starke County, Indiana, chases the prize winner pretty hard. It appears that in 1897 the company harvested 12 bushels per acre from a certain field, which was then plowed up for corn, but left unplanted. This spring a volunteer crop of wheat came up which has thrashed out 17 bushels to the acre.

MONITOR FLAX CLEANER.

The Monitor Flax Cleaner shown in our illustration seems to have solved the problem of cleaning flax. Taken in the rough, with its impurities ranging from 10 to 40 per cent of its total bulk, flax is cleaned by the Monitor in one operation down to 2 per cent or better.

The work is done by sieves and air. The flax passes through an air current before going to the scalper screen and through another on leaving the machine. These air separations are mechanically correct, and are under such perfect control that the operator can do any class of work desired. The scalping screen removes coarse matter; and in addition to the main screen, there is a bottom or sand and small seed screen. Under the main and bottom screens are automatic brushes traveling backward and forward to keep the meshes open for the purpose of securing the maximum service.

The machine will interest all those who handle flax, being efficient and rapid in its work, and durably built. It is built in five sizes, with capacities from 75 to 300 bushels per hour, based largely on the condition of the seed as it goes to the machine. The smallest machine occupies 5 feet 10 inches by 4 feet 9 inches floor space, and the

largest 8x7 feet. The manufacturers, Huntley Mfg. Co. of Silver Creek, N. Y., will gladly give further information.

SATISFYING CANADIAN FARMERS.

Hitherto the Canadian Pacific Railroad, having required permanent grain buyers upon that line to conform to certain specifications as to machinery and capacity when building elevators, had refused to allow the farmers to load wheat directly from wagons into cars. This regulation, of course, created dissatisfaction among those farmers who thought they could get along better without the dealers' help in marketing their grain, and also among that interesting class of buyers variously known in the States as "scalpers," "track-buyers," and those several other cognomens more or less local in form and derogatory in character. On July 13, therefore, the farmers and buyers aforesaid met at Winnipeg to devise ways and means to have this regulation of the road annulled, by legal process, if necessary. Whether the meeting had any effect upon the railroad officials or not, it is impossible to say; but a few days later they announced that commencing with the crop of 1898 the company would hereafter allow farmers to load directly from wagons, provided that cars shall not be unnecessarily delayed thereby.

It is not anticipated that many farmers will take advantage of this privilege. A man is more likely to complain when he is denied a privilege than to make use of one whose real value is problematical;

and the grain trade conditions are naturally so complicated, even in their simplest form, that the wise farmer understands as well as anyone that only the professional grain merchant is able to handle grain to the best advantage. It is always more profitable to the farmer to use the elevator whether he sells at once or stores his grain than to act for himself; and probably nothing the C. P. road could have done would prove the truth of this quicker than to allow their farmers to tamper for a while with the track buyer, or to act as their own middleman. Experience is a good teacher, though it generally costs "mon" to take lessons that way.

REBUILDING THE BURLINGTON ELEVATOR.

Armour & Co. have begun rebuilding the C., B. & Q. Elevator known as "The Burlington," which was recently burned. The new building will cost approximately \$350,000, J. L. Record, engineer and contractor, of Minneapolis, being the builder. The new elevator will stand on the site of the former one, on the east side of Mason's canal, between Twenty-second Street and the south branch of Chicago River, which waterway it is now proposed the drainage board shall improve in that neighborhood by widening the channel, and by reconstructing bridges without center piers. The new elevator will be somewhat smaller than the one burned, having capacity of 1,500,000 bushels only. When this house is finished Armour & Co. will have, with the Milwaukee houses recently leased, a total storage capacity at terminals of about 20,000,000 bushels.

NEW ELEVATOR AT DENVER.

Mr. F. F. Struby has taken out a permit for the erection of a grain elevator at Denver, Colo., for the Northwestern Elevator Company. The permit calls for the expenditure on the building of \$25,000, not including the cost of elevating and grain cleaning machinery. The building will be 50x126 feet in size, and 78 feet high, with estimated capacity of 250,000 bushels. In addition to the elevator, the same company will build a warehouse to cost \$30,000.

This will be the first grain elevator in Denver. All the grain handled hitherto in this city, and the amount of wheat has been considerable, especially in 1896 and 1897, has been upon the railway platforms.

It is not likely that Denver will ever become a great grain market; but the facilities offered by the new elevator will doubtless tend to bring to the city much of the surplus wheat of Colorado and also of the adjoining states of Wyoming and Utah, and possible a part of that grown in Western Nebraska and Kansas, for transshipment by rail over Denver's direct route to Galveston. Colorado is now quite a producer of wheat, and in time it is probable that by irrigation many acres of the arid sandhills and plains east of the city may grow considerable wheat to find a market in Denver.

In September, 1890, Thomas King, a grain dealer of Chillicothe, Mo., was murdered behind a corn crib, presumably for his money. Now two men named Marley and Maurice, both of whom are dead, are accused of the murder by a brother of Maurice, who says he several times heard the men talking of the crime.

Consul-General Stowe writes that the 1897 imports of wheat, corn and flour in all South African ports except one, were as follows: Flour (approximate) 51,474,873 pounds (increase in 1897); wheat, 192,705,757 pounds; corn, 112,480,578 pounds, both decrease. Of these amounts there came from America (approximately) 33,577,058 pounds of flour, 183,240,201 pounds of wheat and 68,974,576 pounds of corn. Wheat shipments were made from San Francisco and New York. The Consul-General says it will be a long time before the country will supply its own needs of wheat and flour. The duty on wheat and corn is 24 cents per hundredweight, and on flour \$1.25.

FLAX FOR LAST CROP YEAR.

The crop year for flaxseed closed July 31. The business of the year indicated a yield below the estimates of a year ago, having been according to conservative opinion about 12,000,000 for the domestic seed crop. Receipts at Chicago, however, fell off 4,478,450 bushels, or more than 50 per cent, not including 925,000 bushels in store at the opening, while the decrease on shipments amounted to fully 40 per cent, or 2,409,000 bushels, prices during the year here having been too high to admit of exportation in view of conditions abroad. Chicago's demand was not as great as in 1896-97, the lessened receipts having been ample for local requirements, and leaving a surplus of 940,000 in store at the close. Reports from the Northwest and Duluth place the visible supply July 31 at 1,900,000 bushels, or about 400,000 bushels in excess of prognostications of the visible for August 1 of a month ago.

The Chicago receipts, 60 per cent of which arrived prior to December 1, were exceptionally good in quality, only a very small proportion grading below No. 1. Fluctuations in values were wider than usual, although the opening and closing quotations for the year were not far apart. In August last prices were forced up by pure speculation in the face of large receipts as much as 32½ cents, receding, however, at the close of the month to \$1. In October seed touched 91 cents, but rose to \$1.10½ in November, from which time on values steadily rose to \$1.39 in May for No. 1 Northwestern, since when prices have been tobogganing. The level of prices for the year was higher than for the year previous, the lowest quotation for Northwestern having been within 1½ cents of the highest price of 1896-97, when the entire range was 63¼ to 89 cents.

Present indications point to a larger yield for the present crop than for that of 1897-98.

TURKEY WHEAT IN KANSAS.

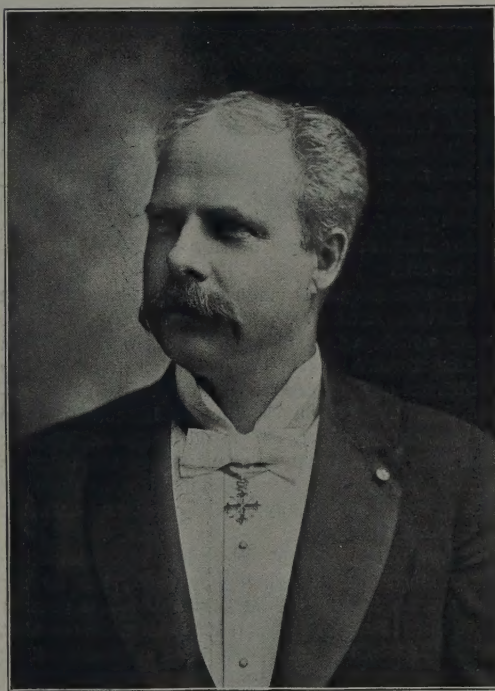
Turkey wheat has turned out a Cinderella. Introduced, it is assumed, by the Mennonites, who immigrated to Central Kansas in 1873 and 1874 from the southern part or Black Sea district of Russia, the wheat for many years was handled very reluctantly by the millers on account of its flinty character. The physical qualities of the berry made it difficult to mill, and these were not, in fact, overcome until millers had constructed apparatus for steaming the berry and softening the bran before grinding. C. B. Hoffman, a well-known miller and flour exporter of Enterprise, Kans., was one of the first millers to observe that this new and heartily despised variety of wheat possessed very superior flouring qualities. Although for all of ten years after the new wheat appeared at the Kansas mills, the practice obtained of cutting the price of the Turkey wheat, as it is called, from 5 cents to 10 cents per bushel below that paid for the softer wheats of like grade, yet the hardness of the Turkey wheat, and the certainty of its always yielding a crop, and a large one under normal conditions, induced farmers to continue its production on the ground that a crop of 15 to 20 bushels per acre, even if worth 70 to 75 cents only, was more profitable than one of 8 to 10 bushels worth 90 cents. The farmers therefore eventually compelled the millers to adapt their mills to the wheat, and since then, says Secretary Coburn, of the Kansas Department of Agriculture, "Kansas millers have carried on the manufacture of Kansas hard wheat flours, which have become famous in the world's markets as superior to any others made in the United States, and equal to the world-famous Hungarian flours made from the choicest growths of Hungaria and Bohemia. This is the wheat," he adds, "that of late years northern millers have been buying quite extensively to mix with the hard spring wheats from the Dakotas for holding up or enhancing the fame of the Minnesota spring wheat flours."

The wheat is very popular among Eastern exporters also. It is believed, however, both by exporters and by the millers that the best growing results can be had only with seed that is frequently

imported, as the climatic conditions of Kansas seem in time to modify some of the wheat's most valuable characteristics.

COL. GEORGE M. MOULTON.

One of the most popular of Chicago's citizen soldiers, now serving in Uncle Sam's army, is Colonel George M. Moulton, of the Second Illinois Volunteer Infantry, one of the regiments forming a part of General Lee's army corps, at present in camp at Jacksonville. The Second, unfortunately, has had no opportunity to display its valor and, now that peace is so near, may have none, unless the Cubans, whom General Lee and his corps are expected to assist in establishing a civilized government in Cuba, should prove incorrigible, as some think they will, and have to be thrashed into common sense; but as Colonel Moulton is an American of Americans, so to say, with a command off the same piece, should he and they ever have the chance to distinguish themselves, we may be sure they will add no less luster to the American arms than have their compatriots of the



COL. GEORGE M. MOULTON.

infantry who have preceded them to Cuba and Porto Rico.

Colonel Moulton, whose portrait accompanies this article, although still a young man, has played a more than common part in the development of the grain business of the great West. Born March 15, 1851, of revolutionary stock, at Readsboro, in historical Bennington County, Vermont, he was brought by his father, at the age of two years, to Chicago, where he was educated in the public schools, graduating from the Central High School. He then went into business with his father, Joseph T. Moulton, whose specialty was the erection of the monster grain elevators of Chicago and other primary terminals. J. T. Moulton was, in fact, the pioneer in this great work, which has been of so much importance to the farmers of the West; and many of his houses are standing to-day as monuments to his science and his integrity as a builder.

Having learned every part of the business under the direction of his father, young Moulton, in 1870, assisted in the construction of the first grain elevator at Duluth, which he was employed to operate for a year; but before that period had ended, he was made superintendent of construction of an elevator at Stillwater, Minn., since which time he has been engaged in erecting the giant houses which are conspicuous landmarks in so many American cities, operating at first with his father as J. T. Moulton & Son, and subsequently (as at present)

as president of the Moulton-Starrett Co. of Chicago, builders of both frame and steel elevators and constructors of large buildings for all purposes. Among the famous elevators built by J. T. Moulton & Son are the Illinois Central's "A" and "B" houses at Chicago, with capacities of 1,000,000 and 1,600,000 bushels respectively, while others of their elevators stand to-day in Portland, Me., New York, Baltimore and Norfolk on Atlantic tide-waters; Chicago, Buffalo, Toledo, Detroit and Superior on the lakes; St. Louis, Kansas City and Minneapolis in the interior; Tacoma, Wash., as well as in innumerable lesser cities, affording a total storage capacity for nearly 50,000,000 bushels of grain.

Extending his business from elevator work, he began with George H. Johnson, the originator of the system, the manufacture of fireproofing, organizing, along in the later seventies, the Ottawa Tile Company, afterward reorganized and made famous as the Pioneer Fireproof Construction Company, whose works at Ottawa, Ill., constitute one of the largest clay-working plants in this country. He has been continuously president of that company, whose products have fireproofed a large number of the most famous of the "skyscrapers" of Chicago. He also organized the Moulton-Starrett Company, builders of large steel, fireproof buildings, and the River Bank Coal Company, supplying coal to his works at Ottawa; and is interested in a number of companies owning important modern office buildings in Chicago.

Colonel Moulton is also conspicuous in the social and club life of Chicago; and in Masonic circles is one of the most noted men in the country. He was married in 1873, and is father of a son and a daughter, who reside at the family home in Calumet avenue, on the site of Gen. John A. Logan's old homestead property.

ARMOUR LEASES ELEVATORS AT MILWAUKEE.

Armour & Co. of Chicago have leased the Chicago, Milwaukee & St. Paul Railroad Elevators at Milwaukee. These houses are known as Elevators C, B and E, with a total capacity of 2,000,000 bushels, and will be operated as the Milwaukee Elevator Company. One reporter of the transaction volunteered the statement that the grain men of Milwaukee had "taken fright," on the ground that "if Armour & Co. begin to buy grain along the line of the St. Paul for the new elevators, they, the local grain men, might as well go out of business, for the reason that Armour & Co. pay half a cent more per bushel for wheat," but Armour & Co. have been operating on the St. Paul system for many years, and they say that the new arrangement will simply enable them to handle grain at Milwaukee as well as at Chicago, and not otherwise modify their business. On the other hand, members of the Milwaukee Chamber of Commerce, grain men, commenting on the information that the Armours will have a man on the floor at Milwaukee, say they believe that "this means livelier competition among buyers at Milwaukee, and will serve both to strengthen that market and to increase its business."

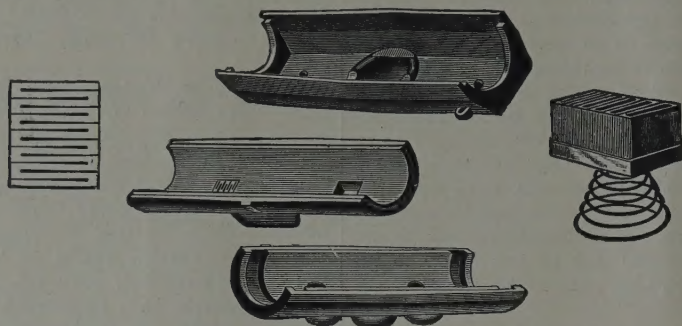
The grain exhibit of Montana at the Omaha Exposition surprised a good many visitors who imagined the Treasure State produced nothing but mineral. Some samples of oats are shown that yielded a hundred bushels to the acre, and many of wheat that went 65 to 70 bushels; while the barley exhibit attracted notice as having samples of some of the finest barley grown on the continent.

Since the famine of 1891 the rural communities of Russia have been required to keep the public granaries filled, in order to have a supply of food on hand in case of a short crop. In 1891, when the practice had been neglected and the granaries were empty, at the first symptoms of the coming famine, a fearful panic set in followed by speculation. In 1897, on the other hand, full granaries prevented both panic and speculation and supplied seed for the next winter wheat crop.

CONVICTION OF HENNIG & CO.

Wm. R. Hennig & Co. of Chicago will go down to posterity famed as the first firm found guilty in a Cook County court of keeping a bucket shop. The jury agreed July 22, but the customary motion for a new trial being made, sentence was suspended until decision on that motion was made. The fine will be somewhere between \$200 and \$500.

The firm of Hennig & Co. was composed of Wm. R. Hennig, Thomas Gibson and O. R. Stratton,



DODGE PATENT CAPILLARY BEARINGS.

who have operated as above and also as Roe & Co., and Stratton & Co., with offices on Van Buren Street. The fight upon the firm began by a raid on their places Aug. 16 and 20, 1897, when the firm applied for an injunction against the officers' arrests, but was defeated. Then they were indicted as gamblers and bucket-shop keepers. One place was closed by the August raids, another in February last, but the country end of the business was finally shut up only on June 30.

One of the leading witnesses was one Chas. Greene of York, Nebr., a man 72 years of age, who told the jury he had been waiting in Chicago for a year for a chance to "get even" with Hennig. He said he had come to Chicago with \$700, which he put into trade with Hennig. His profits (on paper) amounted to several thousand dollars, but that when he asked for his money, Hennig abused him outrageously, calling him a scoundrel who had come to Chicago to rob "honest commission men."

Hennig & Co. are defended by able lawyers, who announce that an appeal from the Circuit Court will be made in case the motion for a new trial is overruled.

SCAB IN WHEAT.

Scab in wheat is not due to insect life, but is a fungus growth, says Prof. J. C. Arthur, botanist of the Purdue University Agricultural Experiment Station. Many fields of wheat this season in Indiana, which just before ripening promised a good yield, were suddenly struck with a kind of blight that killed the heads, or part of them, rendering the grain worthless. It was seen that the part of the head affected turned prematurely white, while the healthy part remained green. The kernels became shriveled and looked moldy. Farmers were disposed to accuse the wheat midge and green fly of causing the damage; but Prof. Arthur discovered that it was caused by a fungus growth, the spores of which on getting into the air were blown over the field, lodging on the delicate parts inside the wheat flower. On penetrating the kernel, the fungus enveloped it with a mesh of moldy filaments, which sapped the life of the kernel, and by forming new spores, which were in turn sown by the winds in other parts of the field, spread the disease in every direction. Looked at very closely, the wheat heads appeared pinkish from the abundance of the slightly colored spores.

There is no known remedy for the disease. It has, however, been studied somewhat—enough, at least, to demonstrate that some varieties of wheat are less subject to it than others, and that those least subject to the disease are in general those which ripen earliest, especially those ripening prior to July 1. Prof. Arthur says therefore: "At present the best measures against scab are the selection of early varieties and hastening early maturity by

early seeding, good culture and similar methods. Nothing can be done to mitigate the injury after scab shows in the field."

CAPILLARY OILING BEARINGS IN GRAIN ELEVATOR WORK.

In one of the engravings accompanying this article is a set of detailed views of Dodge patent capillary oiling bearings. This type of bearing has been found very successful in all lines of work, and es-

pecially so in grain elevators and all buildings where saving in fire risks and cleanliness are desirable. After passing through a series of severe tests, continued through several years of practical application to all classes of work, they have been given the hearty approval of all mechanical men who have tested or inspected them, and doubtless this type of bearing is the most efficient, cleanly, convenient, and simple bearing offered to the public to date.

The oiler proper is made of hardwood with light transverse sawkerfs, cut alternately from either side, which, when the block is compressed in a binder form a series of vertical triangular slots which act as surfaces for the action of capillary attraction. The bearing has no running parts to stop or get out of order, as the oiler will not clog or carry dirt or foreign substances, and the shaft is always supplied with a constant flow of pure oil at any speed, under any strain and at any ordinary temperature.

In grain elevators of late years, many improvements have been made in appliances, but by far the greater number of these improvements show a gain in avoidance of fire risks. It will be seen that pillow blocks supplied with these capillary oiling bearings, by having a continuous lubrication, will

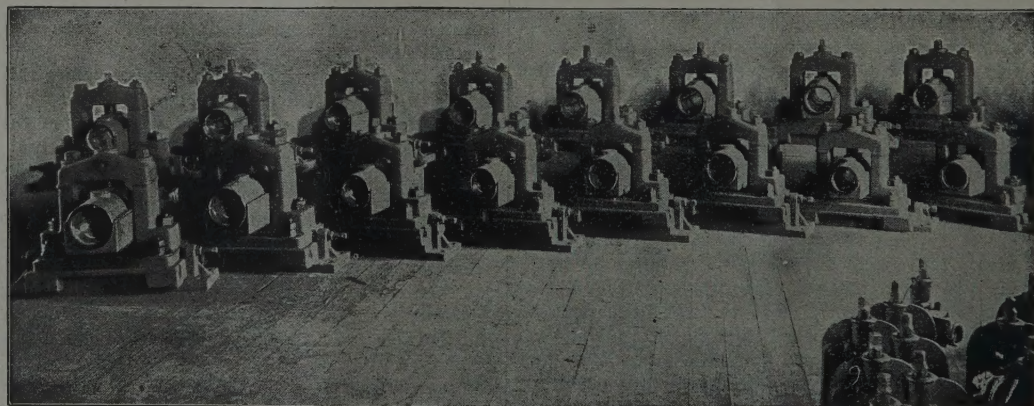
blocks, filtering the oil, and in turn feeding it through the shaft.

In the larger illustration will be found a number of capillary oiling pillow blocks photographed lately on the floor of the shipping room in the plant of the Dodge Manufacturing Co. at Mishawaka, Ind., which company has furnished the blocks in large numbers to many of the foremost and must up-to-date grain elevators of the country. These bearings have been known to run with one filling of oil for eight months, on a 2 15-16 inch shaft, running at 150 revolutions per minute, 24 hours per day. All bearings are babbitted, reamed, and faced for collars, and the feet of all pillow blocks, hagers, etc., manufactured by the Dodge Manufacturing Co. are carefully ground and finished so as to insure a perfectly true foot surface.

STORAGE WARRANT SYSTEM.

The storage warrant system, as applied to parcels of grain held at other than the great market centers and to the operations of interior grain buyers, has hitherto had hardly more than a tentative experience, although in use extensively for a number of years with malsters, operators in seeds, pig iron and ores, and various kinds of manufacturers. The storage warrant is not new, therefore, to the financial world of bankers and money brokers, but it is a method of multiplying quick collaterals comparatively new to the mass of interior grain buyers and millers.

In a few words, the storage warrant system is one for storing personal property on the premises of the owner and issuing receipts thereon, warranted by a guarantee company; which warranted receipts, or "storage warrants," thereupon take the legal form of "warehouse receipts for property" as if issued directly by a licensed warehouseman, and are used as such to transfer the property or as a basis for loans. Applied to the operations of the interior grain buyer, for example, these "storage warrants" will enable such operators to use the grain stored in country elevators to negotiate loans in any money center, the storage warrants serving as collateral, or to transfer such grain by a transfer of the warrant, in the same way as metropolitan operators are in the habit of doing by means of the public warehouseman's receipts. A simple form of statement as to the form of the warrant would be that the local grain buyer's statement of grain in store is practically indorsed and guaranteed by a written agreement of a company sufficiently capitalized to give such warranted state-



6 1/2 INCH PILLOW-BLOCKS WITH SOLE PLATES, CAPILLARY BEARINGS AND CONCEALED COLLARS, TO BE MOUNTED ON IRON GIRDERS.

be entirely safe from heating, and thereby a factor of safety will be supplied which cannot be well overlooked by the careful and conservative elevator owner.

This model of bearing is the very acme of neatness, also, inasmuch as all scattering of oil, which we are accustomed to see in other bearings, is avoided, because the shaft is not swishing continually in the oil chamber and throwing the oil, but instead is steadily gradually and quietly taking up oil from the reservoir and through the capillary

ments a financial character wholly independent of the credit of the grain buyer in whose elevator such grain is stored or by whom it may be owned.

Some advantages of such a system will at once occur to the reader and others will present themselves on reflection, not the least of which is the opportunity it offers the individual interior grain buyer of assuming a more independent position than many feel justified in taking under normal condition of their credit or connections.

The company which at present is making a special

feature of the grain dealers' business of this character is the Guarantee Storage Warrant Company, 620 Calumet Building, 189 La Salle Street, Chicago. This company is successor to the Hales & Curtis Malting Company, who recently sold out their malting business, and is managed by men who have had a long and extensive experience with barley and malt and are thoroughly acquainted with the needs of grain dealers. Their authorized capital of \$250,000 (of which \$200,000 is paid in), with surplus of \$26,000, is the largest paid in capital of any

WHEAT IN THE PACIFIC NORTH-WEST.

The wheat trade of the Pacific Northwest during the shipping season of 1897-98 was the largest in the history of Portland and Tacoma, the two largest shipping ports of the Northwest coast. The demand for wheat came from many foreign lands, and the ships which carried the grain to Europe were larger than had hitherto been engaged in the trade. Our illustration of the "Algoa" at Tacoma,

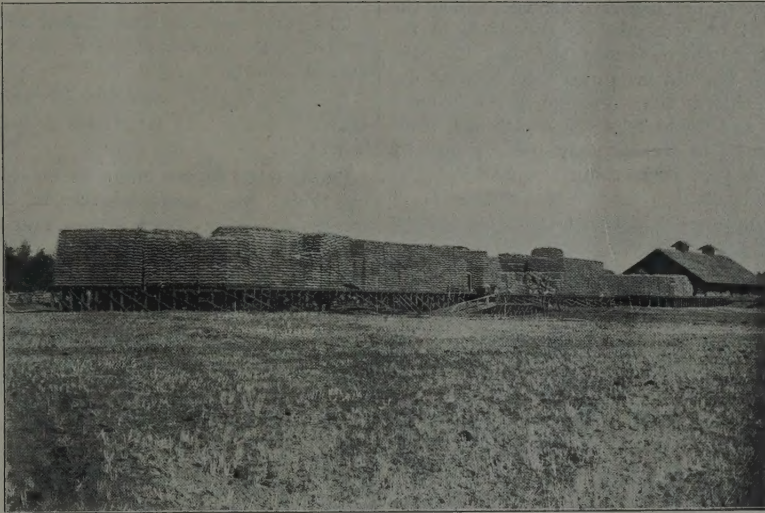
Bay Company's agents, who soon began to swap wheat for furs with the Russians of Alaska. The trade continued on those lines until the gold fever of 1849 broke out in California, creating a new and permanent market nearer home. The surplus thus found outlet in that direction until 1869, when the foreign trade began, the fleet of 1869-70 having been but six vessels, with a total tonnage of 4,379.

Wheat is handled in Eastern Oregon almost exclusively in sacks, very little going to market in bulk; hence the elevator system has made but little progress in that section. This is explained by the fact that the ocean carriers are nearly all English vessels, and that the English shipping laws require that all wheat to be carried across the equator must be shipped in sacks, to avoid the danger to the vessel that might be caused by heating and swelling. The grain, therefore, is sacked at the thrasher and hauled to the nearest railway siding platform, where it is stacked and covered with loose boards to protect it from the light rains that may come before it is loaded into cars for removal to the coast. In some seasons the railroads are literally blockaded with wheat; but fortunately the weather is so fine after harvest that it is seldom any of the grain so stacked waiting for cars is left behind when the rainy season begins.

FAILURES OF FARMERS' ELEVATORS.

It is well worn proverb, says the Republican of Winona, Minn., yet suggestive of instruction in proportion to its popular use, that "experience is a dear school, but fools will learn in no other." Not all men who go to the school of experience are fools, by any means, but it is there where the fool-hardy man takes lessons that generally make an impress upon his character and conduct that lasts during the rest of his natural life.

A few years ago there was inaugurated at various points in Southern Minnesota a movement looking to the establishment of farmers' grain elevators, conducted upon the coöperative plan. Theoretically considered the scheme was a most promising one, and a very considerable number of associations of



WHEAT STACKED IN SACKS AT MISSION, OREGON.

similar company in the United States. They invite correspondence and investigation of the "storage warrant" system, which certainly is of sufficient novelty and potential value to a large class of men in the grain trade as to merit their careful investigation.

THE SQUEEZE IN FLAXSEED.

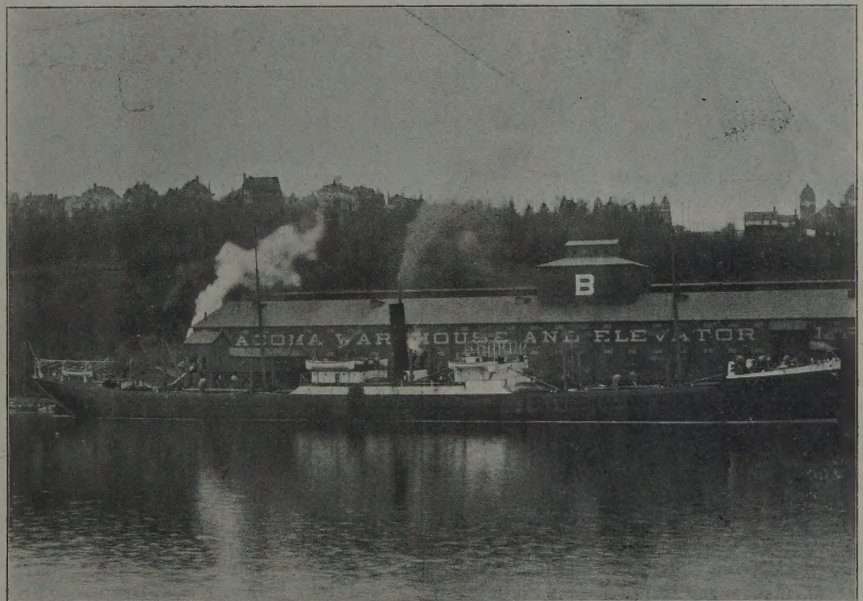
As a second to the Leiter episode in wheat, the National Linseed Oil Company's failure to corner the flaxseed market is hardly up to grade from a spectacular point of view, but it was sufficiently definite in character to merit the witticism that "cornering flaxseed is slippery business."

At the close of April and during May the National Linseed Oil Company bought heavily of both cash flaxseed and futures, the cash at \$1.16½ to \$1.39 per bushel and September futures at prices ranging from \$1.22 down to 83 cents. The market persisting in going the wrong way, on July 27 the company ran out of funds, on the sharp calls for margins, and, transferring its open trades to the Albert Dickinson Company at 83 cents, gave notice that it was out of the future market and called for statements. The losses of the company were quite heavy, the holdings of cash stuff being estimated at from 1,000,000 to 2,000,000 bushels, on which, at prices of July 28 (averaging say 85 cents), there was an average loss of 35 cents a bushel—on some of it as high as 53 cents. There was a rumor July 28 that the company would be forced to an assignment, but although the company's stock July 28 lost \$7.62½ per share on the stock exchange, no failure was announced, and none is expected. The advance of 5 cents per gallon of oil since July 28 has benefited the company, as has also an advance of 10 cents in the price of seed, the latter advance alone being estimated to be worth \$100,000 to the company. On August 6, therefore, the company notified its friends that all Board of Trade claims would be settled on Monday, the 8th. The company will probably be able, under present conditions, to extricate itself without serious difficulty and with less loss than anticipated August 1; and the flaxseed market will, no doubt, be benefited by the fact.

The Chicago, Milwaukee & St. Paul and Northern Pacific roads have each ordered the Chicago grain door put on 1,000 cars now building.

for which we are indebted to the Commercial Review's harvest number, is a fine picture of the record breaker of the season, this steamer having taken out in one cargo from Tacoma 223,505 centals, or 377,508 bushels, being the largest cargo of wheat ever shipped from a North Pacific Coast port. She was loaded by Balfour, Guthrie & Co. for Marseilles, France.

In this connection, it will not be without interest to take just a peep at the country whence this rich



THE ALGOA AT TACOMA—LOADING WHEAT FOR MARSEILLES, FRANCE.

grain comes. Our illustration is a view taken at Mission, Umatilla County, Oregon, in the great wheat fields of Eastern Oregon, in that remarkable country, where, although the rainfall is comparatively meager after the wet season closes, the subsoil furnishes during the growing season sufficient moisture for surface vegetation. Mission is but four miles from Pendleton, and is in the banner wheat county of Oregon.

Wheat-growing in Oregon is an old industry, having been begun as long ago as 1825, by the Hudson's

this nature was formed and put into operation. For a time, some of them at least appeared to prosper, and their business was carried on with a rush. There eventually came a day of settlement, however, and with but few if any exceptions the managers came out ahead, leaving the beguiled stockholders in the lurch. Among the concerns of this kind closed last year, under the stress of circumstances, we find numbered those at Winnebago City, Madelia, and Goodhue. Now, we hear of the elevators of the Farmington Grain and Hay Com-

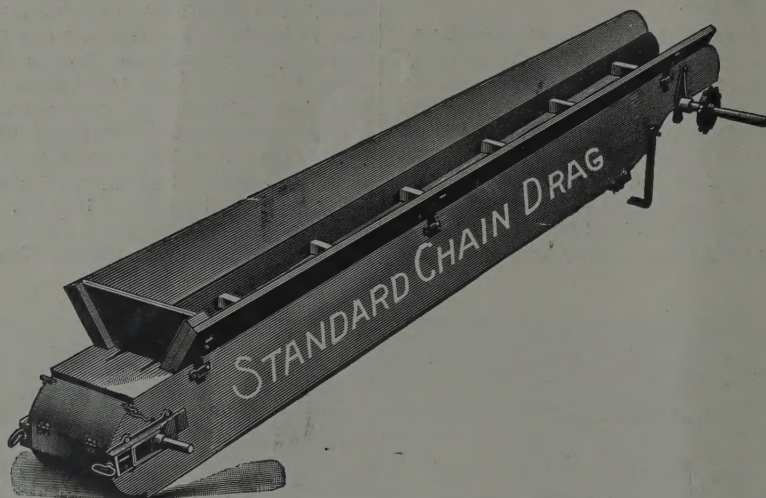
pany, at Farmington and Castle Rock, in this state, having been recently closed on attachments in favor of a Minneapolis firm, who are reported to have an unsatisfied claim of \$14,000 against the company. A similar failure has just occurred in Canada. The Farmer's Elevator Company at Brandon is reported in financial difficulties. Some of the officials, it appears, misused the company's funds. The company was formed to save the local agricultural interests from what was termed "the exactions of the monopolists." In steering to avoid the Devil of monopoly it fell into the deep sea of managerial dishonesty. This is the history of five-sixths of the farmers' coöperative elevator companies of the West.

STANDARD CHAIN DRAG.

Our illustrations show a convenient appliance suitable for handling ear corn, cobs from a sheller, shelled corn, small grain, etc., in situations where without it a good deal of manual labor would otherwise be required. It is self-contained, and can



TWO LENGTHS OF THE STANDARD CHAIN DRAG WORKING TOGETHER.



THE STANDARD CHAIN DRAG PLACED ON AN INCLINE.

be placed in a horizontal position or at any desired angle not exceeding 45 degrees. If necessary or desirable it can be furnished in two or more lengths, one of which can be horizontal and the others at an incline, or all can be placed at an incline as shown in Fig. 1. This feature makes it adapted to almost any conceivable situation where such an appliance would be desirable.

When two or more lengths are thus used together, the head shaft of one is driven from the tail shaft of the other by chain belt, the arrangement of speeds of the drag chains in the different conveyor lengths being such as to prevent clogging or carrying back at the discharge of the driven into the tail end of the driving conveyor. The tail shaft of each length of conveyor is provided with take-up boxes. The head shaft can be driven from any suitable source of power. Its diameter is 1 3/16 inches, and its speed from 90 to 100 revolutions per minute. Each standard length is 12 feet long over all, and 10 1/2 feet between centers of head and tail shafts. The sections can be made of any length up to 20 feet, when desired. The Standard Chain Drag is made by E. H. Pease Mfg. Co., Racine, Wis., who will cheerfully give any desired information respecting it.

The Bulletin des Halles figures the French crop of wheat at 360,000,000 bushels.

WEIGHTS AT KANSAS CITY.

On July 21 N. B. Hieatt, president, E. J. Smiley, secretary, L. Cortelyou, director, and H. Work, chairman of the short-weights committee of the Kansas Grain Dealers' Association, and W. H. Chambers, secretary of the Nebraska Grain Dealers' Association, had a conference with the board of directors of the Kansas City Board of Trade on the subject of the protest of the grain dealers' associations against the manner in which grain has been weighed at certain Kansas City elevators, etc.

The associations had two complaints to make. One was against the general shortage which the dealers have been compelled to submit to in the past, a subject which formed the topic for discussion at the Wichita meeting of the Kansas Association, which was fully reported in the "American Elevator and Grain Trade" a month ago, three certain elevators in Kansas City being especially the subject of the protest and complaint. The other complaint had reference to shipments of coarse grain, purchased in Kansas City for feeding

into the charge made by the Kansas Association. No action was taken by them; but they gave out the hint that if the Kansas City Board of Trade would make the request they would order an inspection of the scales in use in Kansas City, Mo.

DOTS AND DASHES

Atchison, Kans., will give a corn carnival September 23.

Samples of new Ontario wheat received at Toronto have been very fine.

The grain inspection department of Minnesota remitted to the auditor \$5,800 as the amount of fees earned in July.

Reports from the wheat colonies of the Argentine indicate that a very large area is being put under wheat for the coming crop.

Public trials of pneumatic machinery for unloading wheat were made recently in London, which transferred wheat from vessels into barges at the rate of 135 tons per hour.

The manager of the St. Anthony and Dakota line of elevators countermanded an order for gasoline engines to go to his North Dakota houses, on account of crop failure.

A prominent Chicago Board of Trade man recently returned from Europe, says: "The only customer America will have this year will be the United Kingdom; the Continent has all the wheat it needs."

The first car of new oats arrived in Chicago July 18 from Sadorus, Ill., grading No. 3 white and weighing only 25 pounds to the measured bushel. The first car a year ago also arrived on the 18th, but graded No. 2.

The crops in the Dakotas this season may be poor in spots but as a whole they have been good enough to warrant a Farmers' Tribune reader in saying: "We are wearing our best clothes once more and the good old times seem to have returned to stay."

The Central Elevator Company of Chicago has given the following notice: "The commissioner of internal revenue having decided that the tax on warehouse receipts should be borne by the warehouseman, we are ready to refund for all tax collected by us."

A grain commission house in Kansas City has papered its public room walls with United States and Cuban flags, the ceiling being decorated with blue stars on a white background. The stars are arranged in six large groups inclosed with red, white and blue stripes. This is being patriotic with a vengeance, surely.

A telegram from Oberlin, Kans., says the grasshoppers are dying in immense numbers everywhere, but especially in the alfalfa fields. It is thought by some that the alfalfa is the cause; but one observer says that he has found the wings covered with a red parasite of some sort. The destruction caused by the grasshoppers appears to be local and not general.

Mr. and Mrs. W. W. Stephens, lecturers before farmers' clubs, claim the banner wheat yield of Indiana for their farm near Salem. They had in 65 acres which thrashed out nearly 2,900 bushels, or 43 to the acre. They used a home-made fertilizer composed of acid phosphate, tankage and muriate of potash costing them \$1.50 per acre. They seem, contrary to custom, to be fancy farmers to some purpose.

The artificial drying of corn in the Argentine to prepare it for shipment to Europe appears not to have been a success, the Review of the River Plate reporting that 30 per cent of a cargo so dried had turned out bad on arrival at London. The failure is discouraging to Argentine shippers, because while the last maize crop was a bumper one, leaving almost two million tons for export, on account of continued wet and unseasonable weather the grain has not been able to dry and nothing is expected in the export line before October.

purposes. The grain is usually shipped out in the cars into which it is loaded by the seller, the buyer being charged for it on the basis of the weights given by the seller, whereas in the course of transit leakage often occurs. In many instances the weight is found so short, owing, as claimed, to imperfect inspection of cars and weighing at Kansas City, as to cause the buyer heavy loss on the transaction. It was asked that the grain be removed from the cars and weighed at Kansas City, no matter where loaded.

The result of the conference was not all that the representatives of the two associations asked or hoped for; but the usual promises were made by the Kansas City people that "the matter would be looked into and the abuses corrected;" and Secretary Smiley of the Kansas Association informs us that the conference has borne some fruit, because "the Kansas shippers are now securing better weights than ever before."

The Board of Trade people made the proposition to the associations that the two bodies unite to employ weighers to be stationed at the several elevators at Kansas City, each bearing a share of the expense, but we are advised that the proposition will probably not be accepted.

Some days prior to this conference, as stated by the daily press, two members of the Missouri Warehouse Commission were in Kansas City to examine

WHAT ARE WE HERE FOR?

[From a paper by E. J. Smiley, secretary of the Kansas Grain Dealers' Association, read at the Inter-State Grain Men's Convention, held at Omaha, Neb., June 17, 1898.]

This is a pertinent question, and one that we think appropriate for this occasion. We certainly have a purpose in attending this meeting. We have left homes and business and at a considerable expense and self-sacrifice have come together in this convention. The interests we represent are second to none in the commercial world, and it is a fact not to be disputed that there is no line of business in the world of the magnitude of the grain business that has been so allowed to drift like a ship out into the open sea without a rudder. The country grain merchant buys the grain of the farmer, paying him the highest market price, paying him for every pound of grain delivered, invests his money in expensive plants and machinery, loads this grain into any kind of a box car that the railroads see fit

the seaboard, but no one has ever heard of a company formed for the purpose of insuring against loss in transit after bill of lading has been issued by our common carriers in the United States. Brother Grain Dealers, why do we submit to this? What are we here for?

We are granted no special privileges by the common carriers, and most certainly we are not under obligations to them. About one year ago the railroads operating in the territory known as the Trans-Missouri Freight Association Territory changed their rate on live stock from what was known as car rate to hundred-pound rates, thereby increasing the cost of transportation to the shipper from \$2.00 to \$7.00 per car. Did the live-stock shipper submit to this? No. He took the case before the railroad commissioners of the states and sent up such a howl that the railroads were compelled to put the old rate again into effect.

During the past year three of the railroads operating in the state of Kansas strengthened the

never heard of the firm prior to this time. Confirmation arrived in due time, with request that I load the five cars with 625 bushels each. As the market had declined in price from the time I made the sale until confirmation arrived, I loaded the cars as requested. Three months after the grain was shipped I received an account of sales, and one of the sales showed contents of car 224 bushels. Bear in mind that this car was loaded with 625 bushels when leaving my station. As this grain had been weighed in a remote town in Southeast Arkansas, I had no means of locating the steal, and as the confirmation read destination weights, I settled the bill. While this may be an extreme case, I do know that this class of commission men still exist and continue to find suckers. Why can't the different associations locate these pirates and drive them out of business by refusing to trade with them?

Another matter of vital importance to the shipper, in our state, at least, and one for which the deal-



A FEW OF THE GRAIN DEALERS PRESENT AT THE INTER-STATE GRAIN MEN'S CONVENTION, HELD AT OMAHA, JUNE 16.

to place at his disposal, consigns to his commission merchant at a terminal market, accepts ruling price on day of arrival, and waits for three weeks or three months to know whether he has a balance coming to him or whether he is indebted to his commission man. Suppose this car was loaded with "Leiter" wheat, bought at fancy prices and consigned to Chicago in ample time to reach that market to apply on contract. It may be the line or road accepting this shipment has an unusually heavy traffic in live stock, and as the managers of the western railroads set out on side tracks all the dead freight that they may deliver promptly and without delay live stock or freight of this kind, the poor grain shipper learns to his sorrow and loss that his shipment did not arrive in time to apply on contract, and the message reads, "Market declined. Please reduce draft." It is to counsel together for the alleviation of such unjust discrimination that we are here assembled.

Again, the country shipper, after purchasing a car of grain, must assume all risks from the time the grain is purchased until the same reaches destination, and that destination may be the Pacific or Atlantic coast, or one of the Southern ports on the Gulf of Mexico. The exporter may insure against loss in transit after the grain has reached

trucks under some of their antiquated cars twenty-eight feet in length, gave them a new coat of paint, raised the capacity of the car from 28,000 pounds to 40,000 pounds, and sent an order to all agents that such cars must be loaded to within 4,000 pounds of marked capacity, or freight would be collected on this amount. Many of these cars were not lined on the inside to hold more than 28,000 pounds and the shipper was compelled to load far above the inside lining of the cars, and in most cases met with serious loss in transit. The manager of one of the largest elevators in Kansas City told me that practically all of their losses occurred from shipping grain in this kind of cars.

Again, at market centers there are so-called commission men, members of the different boards of trade, irresponsible, and we must say, dishonest, who send out fancy bids to the country merchants, stating that they have placed a large amount of grain at prices above the market and are anxious to give the country dealers the benefit of this market, and promise them satisfactory weights and prompt returns. You will pardon me for relating an experience of my own with a firm of this kind. I received a wire bid some years ago, offering me one cent per bushel more than offered by another firm on same date. I accepted, although I had

ers are to blame themselves, is a dealer at a point trying to secure all grain in sight and not allowing his competitor to handle any of the grain delivered in the town. I visited a town in Southern Kansas some time ago during the time contract wheat was in demand in Chicago, and found that there were three regular dealers having offices located in the town, but was informed that all three of them had started out of town very early in the morning to buy wheat. They all returned late in the day on horseback, bringing their wheat testers, apparently well satisfied with their day's work. You will ask, Were the dealers making any money carrying on business in this way? No, certainly not. You will find in a community where the dealers conduct their business in this manner a general complaint that farmers violate their contracts by refusing to deliver the amount of grain sold. Should a sudden advance of price occur, I contend that the dealers themselves are to blame for the farmer's refusing to fulfill his contract by being over anxious to secure the grain. Let the dealer stay in his office, and when the farmer comes to sell his grain, make his bid, and, if accepted, fill out the contract. Let both parties sign, giving the farmer a copy, and you will hear no more complaints of the farmer violating his contract. Do

we hear of the banker driving out to the farmer's house, offering him money at one-half of one per cent less than some other banker in the town? Do we hear of the commission man sending his representative out to the country buyer offering to handle country dealers' wheat for one-half of one per cent per bushel? No. But we do hear of many country dealers handling grain and taking all the risk for one-half cent per bushel.

I would say, further, that if country dealers would agree on a division of the grain, each one paying what he pleases for his proportion of the grain, the price will regulate itself, and they would soon find that they can handle grain at a profit, remain on friendly terms and enjoy life better.

Another vexed question is the shortages in wheat at terminal elevators. I suppose every dealer present here to-day has had more or less experience with these short-weight elevators. How shall we remedy the evil? The counsel for the correcting of this and other evils is the answer to the question, "What are we here for?" The elevator operator will tell you that the grain is lost in transit or stolen in the yards at terminals. This may be true in a few cases, but we think they are few. Load a car in proper condition, see the same is well coopered, and there is very little chance for loss in transit. It should not exceed one-half of one per cent in transit and handling.

Country shippers should be very careful to make a thorough examination of the scales used in their houses, especially when scales are located on the upper floor without independent foundation; for the sagging of an elevator, due to the placing of grain in one side of the house, is often sufficient to prevent the scales from weighing accurately. Know that your scales are accurate and that the cars are in proper condition, insist on certificate of weight, and then if you have been robbed, write the secretary of your organization, have him keep a record of these complaints, and when they become numerous have him notify the members of his organization and the secretaries of the other organizations; then write your commission man that you will not accept weights taken at these elevators. I have heard commission men make the statement that they were compelled to sell grain to elevators where they had every reason to believe at the time they made the sale the weights would be returned short of the amount there was in the car. It appears to me that if commission men are placed at the mercy of these short-weight houses, the sooner the owners of the houses were expelled from the different boards of trade and others allowed to take their places the better it would be for all.

Do I hear someone say, "Why not make the railroads responsible for the amount of grain they receive, the same as all other classes of freight?" No doubt this would be a solution of the whole question; but it will require national legislation on this question, as several states have passed laws to make common carriers responsible, but so far they have all been declared unconstitutional.

What are we here for? To agitate and discuss evils and suggest remedies for the wrongs we have submitted to for so long.

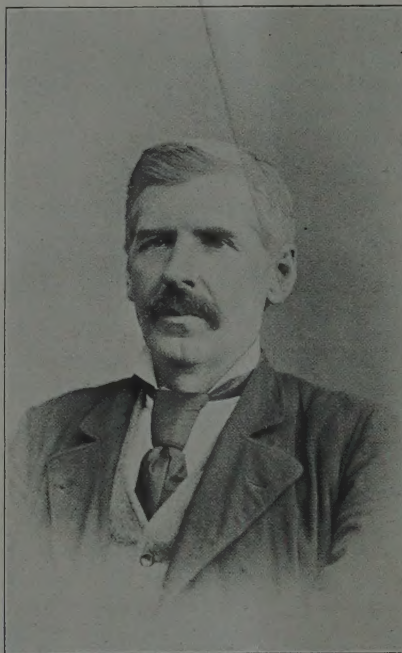
Let us do our duty to ourselves and be loyal to our association, and when we shall again assemble in joint convention we shall be able to rejoice at the progress made in elevating our business to the plane of importance it should occupy in this great nation, the granary of the world; ever remembering that a nation's heart that opens and reaches out to the suffering, distressed and down-trodden Cuban will also respond to reason and correct the injustice and wrongs of which we complain. Then let us be loyal to that nation, and inculcate pride for its achievements. Let us remember that our prosperity and our glory must become refulgent or dimmed as the flag of our country floats in triumph or is trailed in defeat.

A thrasher company operating in Pinal County, Arizona, reports having thrashed out over 4,000,000 pounds of grain, chiefly wheat, in that county up to August 1.

SKETCH OF LYMAN SMITH.

In our last issue we regretfully chronicled the passing away of Lyman Smith. Occurring, as it did, almost on the day of publication of this journal, we were unable to give more than brief mention of the sad fact, reserving a more extended notice of his life and services until the present issue. He enjoyed a large acquaintance throughout the country with business men and those in public life, who will be interested in the summary that follows, and in the portrait of his strong and virile but kindly face which is given herewith.

Lyman Smith was ingenious enough to have been born a Yankee, but his birthplace was Camden, Oneida County, N. Y., where he first saw the light Oct. 12, 1825. We have no details of his education, but it was probably only such as his native town could give him, but whatever he may have lacked in education was more than compensated for by natural ability; for we find that he had learned the trade of carpenter and joiner and had become a successful contractor before he was 20 years of age, having by that time secured the contract for building the largest church and other



LYMAN SMITH.

important buildings in his native town. Indeed, he had, before he was 20, settled himself in life by purchasing land and building himself a house in Camden, to which, March 1, 1845, he took his bride, Miss Alzina Gifford of Camden.

Camden, however, failed to satisfy him, and about 1850 we find him at Port Huron, Mich., where he built a new home, and established a machine shop, engaging in the manufacture of sawmill machinery, especially pushing an improved shingle mill of his own invention, which came into extensive use in the United States, and to some extent in Europe, at a time when it was a rare thing for American machinery to find favor in the Old World. In 1855 he went to Port Austin to take charge of a sawmill which he had built at that place for a lumber company, the mill being at the time the largest in that part of the state. A few years later he again pushed on into the West, going to Keokuk, Iowa, where, however, he remained but a short time, having decided to go South in the hope of improving the failing health of his wife. In 1859, then, he located at New Orleans, where he became a soap manufacturer. He was successful in his business, and was accumulating property when the civil war began in 1861, whereupon he closed out his business and came North, where his sympathies were, and where his relatives and nearly all his friends lived.

Locating that year at Erie, Pa., he was engaged in various occupations during the succeeding years

until 1865, when he became interested in the development of the Pennsylvania oil regions, then the bonanza part of the country. Between 1865 and 1871 he organized a number of oil companies and opened up much new oil territory, becoming, in fact, one of the most widely known and extensive oil operators of that period, during which he made and lost a large fortune. He left Pennsylvania just in time to invest what little he had saved out of his oil ventures in Chicago, and have it swept away by the great fire of 1871, leaving him empty-handed.

Leaving Chicago in 1879, he went to Kansas City, where he organized the Kansas City Machinery Company, building a shop and equipping it for the manufacture of mill and elevator machinery and for a general machine shop business. During his residence here, fully alive to the possibilities of Kansas City as a railway center, he organized the Union Belt Line Railway Company to construct a belt railway around the city. He obtained the right of way, made the surveys and prepared all the details necessary for the construction and equipment of this road, but at the last moment he failed to establish his own supremacy over the enterprise, and others came in to reap the fruits of his labors and enjoy the benefits of the project.

In 1882 he became interested in the great subject which continued to engage his attention during the balance of his life, and by which he will be best remembered by the world, do doubt; and that is, the pneumatic process of handling grain and other subdivided substances and materials, which is known as the Smith Pneumatic Transfer and Steel Storage System. This system of handling and storing grain and farm products and other perishable commodities, which for sixteen years he had been at work perfecting and introducing, is already in quite extensive use, and destined, without doubt, in the future to largely increased use. By many it is ranked among the most important of the great inventions of the time, the great value and utility of which have not yet been fully recognized by the public, although it won the highest award and diploma given by the Columbian Exposition of 1893. The pneumatic system was but a part, however, of his contributions to the world's store of useful inventions, for during his long and varied business career he took out a number of patents on machines and methods, among which the following have come into general use: The use of a coiled spring instead of weights for balancing window sash; a machine for sawing shingles from the block instead of splitting as then generally practiced; molds for casting soap, doing away with the tedious and costly way of molding cakes by hand as formerly was done; a vacuum separator for extracting crude paraffine, sugar and similar saturated substances from their fluids by the natural pressure of the atmosphere; and a water filter in which the flow may be reversed and the filter cleansed.

At the time of his death he was president of the Lyman Smith Pneumatic Elevator and Transfer Company, and member of the Western Society of Engineers and of the American Inventors' Association. He celebrated his golden wedding in 1895, and the following year his wife died. He himself died July 9 at Urbana, Ill., after several months of great suffering from dropsy, this acute attack having been brought on by overwork and exposure superintending the erection of a pneumatic elevator at Brooklyn, N. Y. He leaves four children and numerous grand and great-grandchildren. Although his various business interests through life took him to all parts of the country, and he was well known in New York, Washington, Cleveland, Buffalo, Pittsburg and Kansas City, Chicago was for the past fifteen years his headquarters, and nominally his home; and after his death his remains were brought to this city for burial in Oakwoods Cemetery.

The mysterious deaths of a large number of horses in Harvey and McPherson counties, Kansas, first supposed to be due to glanders, are explained as due to millions of minute worms which permeate the stalk, or pith, of the grass and hay. Their origin is unknown.

..Points and Figures..

More headers have been used in Washington this harvest than ever before known.

Posey County, Indiana, claims a wheat crop for this year of 1,000,000 bushels, not including seed.

The grain receipts of Chattanooga, Tenn., during the year ended June 30, amounted to 3,850,000 bushels, against 2,750,000 for the year previous.

The prospects of a good rice crop in Georgia and South Carolina are at present first-class. The market has been bare of native rice for several months.

Thrashing returns to the state bureau from Ohio indicate the wheat crop conditions at harvest at 83 instead of 89 per cent, as reported from Washington.

While it stated that it costs 37½ cents to raise a bushel of wheat in Kansas and Nebraska, Washington papers claim that 27 cents will pay the cost in that state.

The cost of holding wheat in the Toledo elevators is about 1¼ cents per bushel per month, this sum including storage and insurance charges and interest on advances.

The Cincinnati Price Current estimates the Canadian wheat crop at about 38,000,000 bushels for Ontario, 27,000,000 bushels for Manitoba, and 5,000,000 for the territories.

In the Walla Walla, a Washington paper claims, the happy farmer has been harvesting 46 bushels of wheat to the acre, and 80 bushels of barley. No wonder the city of Walla Walla has eight banks with deposits of \$2,000,000.

J. M. Brown, representing Counselman & Co. of Chicago, just before August 1 made corn purchases in Iowa of 1,000,000, all bought within three days, at a price above 25 cents, having meantime refused 7,000. Mr. Brown's performance is said to beat the Iowa record for three days' work.

Secretary Coburn, of the Kansas State Board of Agriculture, in his August crop bulletin, places the yield of winter wheat at 60,570,455 bushels, the largest crop save one in the history of the state. The average condition of corn he places August 1 at 59 per cent of a full crop. The hot winds and drouth of July were very severe on the growing grain.

President Tanner of the Illinois Grain Dealers' Association has appointed the following committees: Executive committee—Theo. P. Baxter of Taylorville, Elwin Beggs of Ashland, Ed. Putnam of Rossville; arbitration committee—H. C. Hall of Paxton, A. E. Selby of Golden, B. P. Staley and Mr. Ward of Champaign, and Charles Voris of Windsor.

An old printer, who has examined the alleged substitute for India rubber prepared by the chemists of the glucose company from corn, says it isn't nearly as good a substitute for rubber in toughness, "resiliency," or any other quality worth mentioning, as an old glue and molasses roller is. The chemists appear to have been wasting a lot of valuable time, from a typographical point of view.

The country newspapers are full of "big yield" stories about this time. Here is one from Champaign County, Illinois: A M. Davis, living four miles south of Danvers, reports 25 acres of oats, sown in April and ready to be cut July 4, which yielded over 45 bushels to the acre, and weighed 35 pounds to the measured bushel; the average of oats being the year on 18 to 25 pounds. He sold the entire crop for seed at double price.

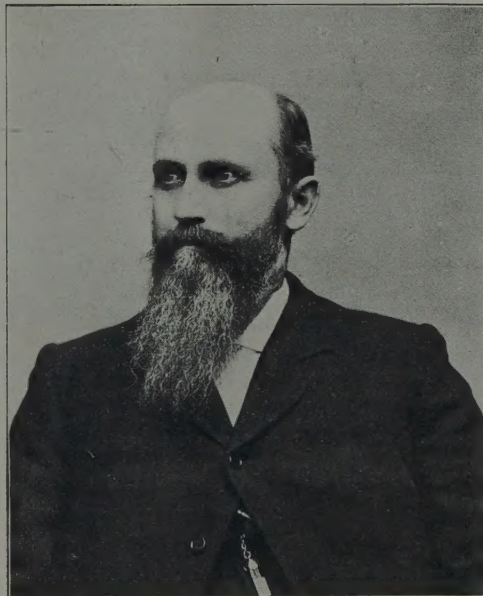
W. G. Johnson, state entomologist of Maryland, after careful inquiry, places the wheat yield of that state at not over 75 per cent of an average crop. The shortage of the crop he attributes, first, to the Hessian fly; secondly, to the wet spring, accompanied with unusual cold weather and freeze in April; thirdly, to the drouth which prevailed during the latter part of May and all of June; and fourthly, to the attacks of smut, rust and another disease known as septoria, which causes the heads to look brownish. He finds the largest losses in the lower

west-shore counties and the best yields in the four counties constituting the upper eastern shore.

One factor in explanation of the enormous increase in European corn requirements, as evidenced in American exports of 206,500,000 bushels during the past year, is largely found in the extended use in Continental Europe of corn instead of barley and other grains for cattle. Fritz Arnold, a leading German importer, says that with the cattle of Germany feeding on American corn there will be a market for 150,000,000 bushels in German agricultural districts alone; that a large share of the corn that now goes weekly to Europe is for the German farmer, and that the rest of Europe is learning the same lesson.

NORTHWESTERN IOWA GRAIN SHIPPERS.

The annual meeting of the Grain Shippers' Association of Northwestern Iowa was held at the Grand Hotel in Council Bluffs, July 19. The only matter of interest taken up by the meeting was the subject of railway rates, and the friendly contest with the railways of Iowa now being prosecuted by the As-



F. D. BABCOCK.

sociation before the courts to secure a reduction of rates. Attorneys Harl and McCabe, who have conducted the legal proceedings on behalf of the Association, were present to make a report. The prospects of obtaining permanently lower rates on grain are believed to be very good—certainly most encouraging. The meeting was open to all who chose to appear.

The annual election of officers took place with the following results: President, E. J. Edmonds, Marcus; vice-president, E. M. Parsons, Carroll; secretary and treasurer, F. D. Babcock, Ida Grove; assistant secretary, Geo. O. Holbrook, Onawa; Executive Committee, E. J. Edmonds, F. D. Babcock, E. M. Cassady of Whiting; Ira Conger of Galva, and J. A. Keenan of Battle Creek.

Previous to the meeting of the Grain Shippers' Association the annual session of the Grain Shippers' Mutual Fire Insurance Association was held, at which the following officers were elected for the ensuing year: President, E. J. Edmonds, Marcus; vice-president, E. M. Parsons, Carroll; treasurer, J. A. Keenan, Battle Creek; secretary, F. D. Babcock, Ida Grove.

Col. Rogers of the Minneapolis Chamber of Commerce is quoted as saying that "the wheat crop of Minnesota and the Dakotas will be above the average in both quality and quantity." With 10 to 15 per cent increase in the acreage, the wheat crop may turn out the biggest those states have ever grown, and this in spite of considerable local damage by hail and hot weather.

WRITTEN CONTRACTS.

[A paper read by A. H. Bewsher at the Inter-State Grain Men's Convention, held at Omaha, Neb., June 17, 1898.]

In my endeavor to select a subject containing the most interest for the many, I hope I have chosen one worthy of your attention and consideration. The subject in hand is, in my estimation, one that must sooner or later demand your united action; or, failing in this, continue to act as the leak it is through which already seeps too much of the meager profits remaining to the country dealer. In these days of sharp competition and small profits it behooves all of us to take a firmer grasp upon our business lines and to be ever watchful of these small affairs. Therefore, if from what I say you are able to deduct but one grain of value, I will feel well repaid for my efforts.

This subject of written contracts may grate on the purse strings of some dealers present and recall memories of "what might have been" had they pursued another course during the late advance in markets. To all such I make due apology for recalling unpleasant thoughts, and adopt the subject only because I consider it timely.

The custom of putting grain contracts into writing, as far as it pertains to the contracts between the farmer and shipper, is not very closely followed. Besides the line elevator owners, occasionally you find a single house dealer insisting upon written contracts, but the majority leave their trades solely with the honor of the farmer. As you know, this practice is not consistent with good business principles. How many of you have ever sold any stuff to an elevator or receiving house for which a contract was not given and taken? Your word and honor are surely as good as those of the farmer; yet these buyers exact from you a written contract, not because they doubt your good intentions or honesty, but because it is business; because they want something to show for their trade in the event of a controversy; because your memory or theirs may prove faulty; and, finally, because what they bought of you they have sold and consequently must insist upon your delivering it to them. Is not your position a similar one? Can you any better afford to sustain a loss for your farmer friend than your receiving house can for you? No, you cannot; yet I dare say there are many among us who lost hundreds of dollars during the late advance simply because they failed to insist upon the fulfillment of the farmers' contracts, whether written or verbal, for fear of offending their trade.

This fear of giving offense is the keynote of the whole situation. Would this same farmer feel offended if he went to the bank to do business and was obliged to sign the necessary documents? When he buys a piece of machinery for which he does not pay cash, is he offended when asked to sign a note? No, my friend, he is not. He is offended in your case only because he knows that a pretended offense will excuse him from signing your contracts, knowing as he does that you are afraid to insist upon a written contract lest your neighbor may be a little more lenient and agree to take the stuff without.

This condition, of course, is not characteristic of all farmers. There are some whose word is as good as their bond; but there are others, just enough of them to lose a dealer a neat little sum every time the markets make any material advance; and it is on account of these that it is necessary for you to be careful to put your contracts in shape to be easily proven. The only way to do this is to take written contracts from all. You cannot afford to discriminate; for these "contract jumpers" seem to be endowed with an unusual amount of sensitiveness and would be the first to take offense at a discrimination, and you would thereby deprive them of the pleasure of jumping another contract with you later on when the market advanced a cent or two.

In my advocacy of written contracts, do not understand me as believing verbal contracts to be invalid, for they are not. Legal authority advises me that in the eyes of the law a contract is an agreement in the mind, and, whether written or oral, is binding if satisfactory proofs can be fur-

nished. The paper upon which a contract is written is valueless, excepting as proof positive of the agreement; and it is only because of this positive proof that I urge written contracts. I have often heard the question raised as to whether or not a contract, either written or verbal, is binding where a payment has not been made thereon. This same authority advises me that it is, the price agreed upon for the grain being a consideration in itself. Before a court your wire or mail acceptance of a bid, supplemented by a confirmation from the buyer, constitutes a contract, although no payment has been made thereon. Even contracts made through telephone, where neither party sees the other, and no money is paid, is in many cases held as valid. Consequently, it is only necessary for you to take a decided stand to put an end to this pernicious practice.

You are well aware of how contracts are filled upon a declining or advancing market,—how when a decline occurs, the farmers had made "miscalculations" as to the capacity of their bins or cribs and that they contained more than they had figured upon. But it is strange, isn't it, that these same bins or cribs rarely if ever overrun when an advance occurs; but instead the farmers have had an increase in pigdom, or some steer has regained his lost appetite, and it will be necessary for him to keep

no doubt, had more or less experience with it. The outcome is obvious. The custom of plugging or defaulting contracts is becoming worse instead of better. There are some who have been bitten who are trying to insist upon fulfillment of contracts, but they are sadly handicapped by their more liberal neighbors. It is within the power of this Association to say whether or not this practice shall continue; and if not, to devise some means of exterminating it. You have accomplished more difficult things, and there is no question of the outcome of this one if it meets with your favor.

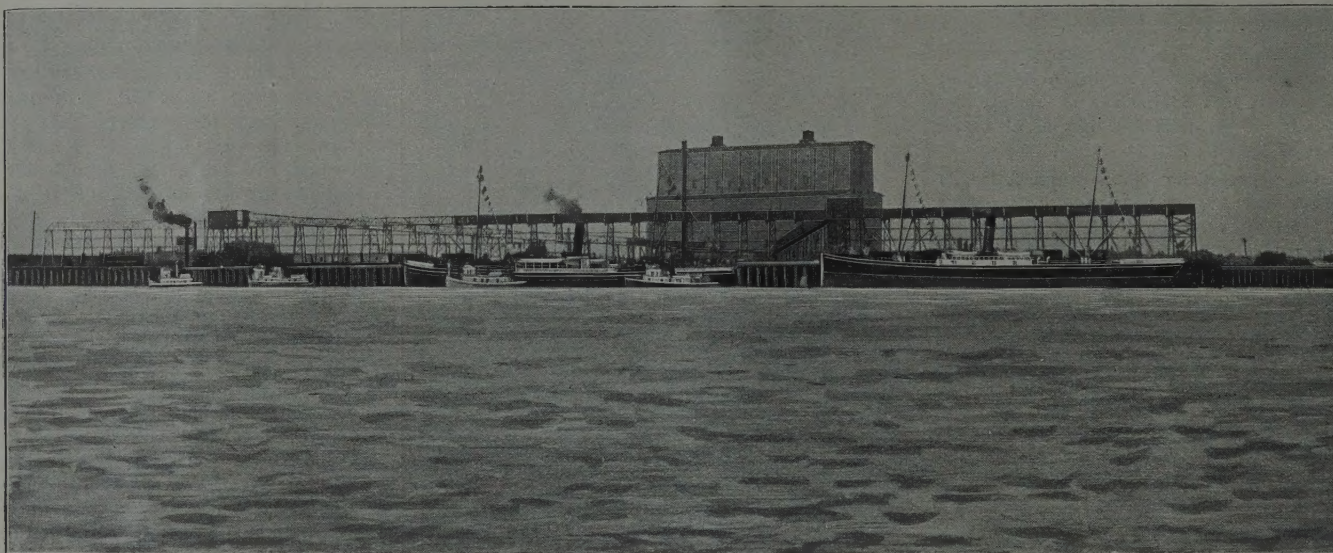
There might have been more said upon this subject. A solution to the problem might have been offered; but I thought your personal experience and wisdom would bring out a better means of handling it than any I could suggest. Thanking you for your attention I leave the matter in your hands.

THE FITCHBURG ELEVATOR LOSS.

The insurance on the Fitchburg Elevator at Boston, destroyed April 17 by fire and explosion, has finally been adjusted so far as the companies are concerned. The elevator was insured for \$104,000, and on May 17 an agreement was reached for the appointment of three referees to adjust the loss.

THE ILLINOIS CENTRAL ELEVATORS AT NEW ORLEANS.

No one factor in the recent growth of New Orleans as a commercial city has been more conspicuous than the influence of the Illinois Central Railway Company. Having, soon after the close of the "Reconstruction" period, secured control of the old Mississippi Central Railway system and other lesser lines in Mississippi and Tennessee, and made them parts of one continuous system extending from the Northwest, Chicago, St. Louis, Memphis, etc., to New Orleans, with branches penetrating the rich contiguous lands, the Illinois Central Company began to systematically develop the natural resources of the country and to provide in advance of actual requirements of the people every facility expected of a railway for the transportation accommodation of the developing industries of the country. This program has been entirely successful in stimulating agricultural production, at least. During the past three years, so much having been done in other directions, the Illinois Central Company, seconding the efforts of the grain dealers of New Orleans, has given special attention to the grain trade, seeking to divert grain intended for the export trade from Atlantic ports to New Orleans. As a result of this



ILLINOIS CENTRAL ELEVATOR "D," STUYVESANT DOCKS, NEW ORLEANS, LA.

back two, three or four hundred bushels for feed, or some other excuse, equally as ridiculous, for defaulting all or part of their contracts. It is useless for you to try to convince them that you have sold the stuff, for they know as well as you do that you knew this advance was coming. Every grain dealer does. That's why you are all burdened so with riches!

I personally know of one shipper who lost lots amounting to 12,000 bushels during the late advance, who, when asked why he did not insist upon delivery, replied that he could not afford to lose the trade of these farmers and their relations and friends. I know of another whose experience in past advances had, he thought, taught him to be cautious; hence he held back six to eight thousand bushels of his purchases unsold, figuring that as about the proportion he would lose. As you know, the reaction came. Corn went lower and his purchases were all filled to overflowing, with the result that he sits to-day nursing 8,000 bushels on which he has a loss of 3½ cents below cost. There are many cases like these. You would be surprised to know the number of dealers there are who buy grain and are then afraid to sell it, until, at least, delivery begins, for fear of some circumstance arising that may cause them to lose it. Now, this, as you know, is not a healthy condition of affairs and should not exist; but it will exist and will grow just so long as some dealers will encourage it, which they do by not insisting upon a reasonable fulfillment of their contracts.

Now, my friends, it is useless for me to occupy your time longer upon this subject. You have all,

It required six weeks to remove the grain before the building and machinery could be examined. On July 15 the majority of the referees agreed to an award for loss and damage of \$70,242.67, upon which the insurance companies' adjustment committee have allowed interest at the rate of 6 per cent from June 20 to July 26, making a total of \$70,664.13, involving thirty-six policies. In view of certain criticisms made by the officials of the Fitchburg Railroad it is thought that the award will not be accepted by the railroad company as they had expected to be reimbursed on the basis of a total loss.

The decline in the price of wheat and flour in Spain, and the consequent cheapening of bread, has done much more than a common sense view of the war to restore order in Spain and throw cold water on the schemes of Don Carlos.

The railway officials estimate that it will require 2,000 trains of 20 cars each to carry the wheat crop of the southeastern counties of South Dakota alone to market, and 100,000 cars for the Sioux City district. All the roads are crowding repairs on cars and strengthening them to take the maximum load.

Toledo has been the banner wheat market for this season's new wheat, as measured by the receipts up to a week ago, the inspection record showing a larger percentage of No. 2 red than any other market. One feature that is helping Toledo as a market for trading in futures, as Zahm points out, is "the fact that there is a great deal of trading in 1,000-bushel lots."

policy the grain receipts of New Orleans have gained rapidly during the past three years, the number of elevators meantime increasing from one to seven, with a total storage capacity of 3,500,000 bushels. Four of these elevators are owned by the Illinois Central Company; another is an old house in Harmony Street, built when all the grain came in via the river; the other two being the T. & P. Elevator at Westwego, and the Chalmette Elevator at Port Chalmette.

The oldest of the Illinois Central Elevators are those called "A" and "B" at Southport, a suburb four miles above the up-river limits of New Orleans. These elevators are shown in the illustration, seen looking to the south. The building on the extreme left is "B," which is simply a storage house, and provided with such machinery only as is needed to store grain. Next to it is elevator "A," which contains all necessary machinery for handling grain in and out of the premises. It is also connected with the wharf by the long conveyor gallery seen on the right of the picture, which has a double set of conveyor belts to load two vessels at once. The unloading and shipping capacity of this plant is 150 cars per day, with storage capacity of 500,000 bushels.

Elevator "C," located in the terminal yards of the Yazoo and Mississippi Valley Road, stands in the business part of the city, and has railway connections only. It is a comparatively small house, having only 250,000 bushels' capacity, and is arranged as a cleaning house. It contains a grain drier built by John S. Metcalf & Co., to handle 20,000 bushels of grain each ten hours; also oat clippers, grain

separators, etc., to handle low grade grain and bring it up to the export requirements of the company and the New Orleans Board of Trade.

The most important elevator of this system, however, is the house known as elevator "D," built two years ago, at the new Stuyvesant docks at the foot of Louisiana Avenue, right in the city, and on the river front. Its position with reference to the river

cupping of the belts at receiving points is done by concentrating rollers.

The elevator is supplied with complete water system with tanks on roof of cupola, and also fire protection apparatus as well as dust collecting machinery. The drive power is a Corliss Engine of 650 horse power, and an independent high speed engine operates the electric light dynamo and fire

RESCUING MR. JOSEPH LEITER.

The politicians and students of political movements insist that the Kansas farmer is "queer"—"you never can tell what he'll do next;" and cite as the latest evidence a movement to "take up a subscription" for Jos. Leiter, talked of in various places in Western Kansas. Well, this movement, which is said to have originated with Capt. F. D. Barnes of Harvey County, if it goes, will be creditable to the Kansas farmer's sense of gratitude; for certainly the Kansas farmers, rightly or wrongly, believe that Mr. Leiter held up the price of wheat while they unloaded their wheat—on him—at a handsome profit to themselves. They can afford to be generous. The Barnes scheme is to donate to Mr. Leiter one cent per bushel on the entire Kansas wheat crop, which at Secretary Coburn's estimate would net the dethroned wheat king about \$650,000, and, perhaps, "come in handy" about now.

THE "GOOD OLD TIMES" IN THE GRAIN BUSINESS.

A local historian, writing to the Bloomington Pantagraph of the ancient village of Gridley, in the northern part of McLean County, Illinois, recalls the "good old times" in the grain business in Illinois, when the title "Grain Buyer" attached to one's name was equivalent to calling him a millionaire nowadays. James M. Mitchell, we are told, was the first man to buy wheat at Gridley, beginning as soon as his store was opened in 1858, buying for Boise & Van Vleet, an El Paso firm; but the first elevator was built in the town by a Mr. Kent in 1860. In 1861 Silas E. Brooks went to Gridley to buy for a Boston firm of grain dealers, who allowed him to pay 12½ cents per bushel for all grain he bought, out of which he had to get his own commissions, the Boston philanthropists generously furnishing the lumber for the corn cribs, however. Mr. Brooks employed Mr. Kent to buy for him, and the two got in over 100,000 bushels at an average price of 10 cents per bushel. This grain the Bostonese grain merchants held for four years, and then sold at \$1.03, which beats modern cornering all to death. As late as 1862 (when the export



ILLINOIS CENTRAL ELEVATORS "A" AND "B" AT SOUTHPORT, LA.

is shown by the illustration. This elevator which, like all the other houses in the city, was built by James Stewart & Co. of St. Louis and Buffalo, is 300 feet long and 83.6 feet high, and has 180 bins. Designed for the quick handling of grain, it has two parallel tracks running through it, from both of which cars are unloaded into sinks by Clark Steam Shovels, cars being handled by James Stewart & Co.'s car puller. There are also seven unloading legs working from two tracks, on each of which seven of the largest size cars can be set at one time. These legs carry 7,000 bushels of grain per hour. As the grain is unloaded into the sinks, and by the unloading legs, it is elevated to the top of the building and received in garner over eleven hopper scales of 1,200 bushels' capacity each, and having been weighed, it is then conveyed to the proper bin.

The shipping facilities are more complicated. There are, in the first place, four shipping legs carrying 15,000 bushels per hour, which can be supplemented, if need be, by the seven unloading legs, which are arranged to be used also for shipping. In order to get ample space immediately adjoining the berths of vessels to handle the baled cotton, bags of cotton-seed meal and other freight shipped from this dock, the elevator was set back from the river, and is connected at each of its ends with a gallery conveyor which runs parallel with the river, by two conveyor galleries of 434 and 539 feet long respectively. Each gallery contains two 36-inch belts with carrying capacity of 20,000 bushels per hour, and equipped with necessary trippers. With this system four vessels can be loaded simultaneously with grain without in any way interfering with the loading of miscellaneous merchandise, the belts delivering grain as fast as the vessels can take it without being crowded to their capacity. The galleries are 50 feet above the docks. The long gallery has 46 shipping spouts, which are made of sheet steel, with 24-inch revolving head to receive the grain from the tripper spout. The belts in these galleries transmit the power to operate the dock conveyors. The belts are supported on wooden rollers, with turned iron journals running in babbitted oscillating mounted bearings on stands. The slack is taken up by means of a screw adjustment; and

pump. The pulleys are of the iron center and wood rim type, and power transmission is by the rope system. The power transmission and belt conveyor systems and shafting were furnished by the Dodge Mfg. Co. of Mishawaka, Ind., through James Stewart & Co., contractors of St. Louis, for the building.



ILLINOIS CENTRAL ELEVATOR "C," POYDRAS ST., NEW ORLEANS, LA.

[The publishers are indebted to The Railway and Engineering Review of this city for information and cuts.]

Mail advices from Bremen state that the stock of rice in Bremen, Hamburg and England at the middle of July was only 91,100 tons, against 196,200 tons at the same date a year ago.

price of corn averaged 40 cents), Mr. Boise bought of N. J. Pillsbury, now Judge Pillsbury of Livingston County, 400 bushels of corn at 10 cents, which the future judge took about all summer to deliver, hauling it with an ox team.

Iowa corn experts predict a crop of 300,000,000 bushels, or the biggest crop the state ever produced.

THE WIND-SWEPT WHEAT.

Faint, faint and clear,
Faint as the music that in dreams we hear,
Shaking the curtain fold of sleep
That shuts away
The world's hoarse voice, the sights and sounds of day,
Her sorry joys, her phantoms false and fleet;
So softly, softly stirs
The wind's low murmur in the rippled wheat!

From west to east
The warm breath blows, the slender heads droop low,
As if in prayer.
Again, more lightly tossed in merry play,
They bend and bow and sway,
With measured beat,
But never rest:
Through shadow and through sun
Goes on the tender rustle of the wheat.

Dreams, more than sleep,
Fall on the listening heart and lull its care;
Dead years send back
That treasured, half-forgotten time,
Ah! long ago.
When sun and sky were sweet;
In happy noon,
We stood breast high 'mid waves of ripened grain,
And heard the wind make music in the wheat!

Not for to-day,
Not for this hour alone, the melody,
So soft and ceaseless, thrills the dreamer's ear!
Of all that was, and is, of all that yet shall be,
It holds a part;
Love, sorrow, longing, pain,
The restlessness that yearns,
The thirst that burns.
The bliss that like a fountain overflows,
The deep repose,
Good that we might have known, but shall not know,
The hope God took, the joy he made complete;
Life's chords all answer from the wind-swept wheat.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

SHIPPERS SHOULD KNOW AMOUNT EACH CAR CONTAINS.

Editor American Elevator and Grain Trade:—The matter of shortages is one of which we cannot speak intelligently, as we have no hopper or track scales, though we believe that every country elevator man should have some means of knowing just how much each car contains.

Yours truly,

B. M. STODDARD & SON.

Toluca, Ill.

PEOPLE WHO TRADE AT TOLEDO.

Editor American Elevator and Grain Trade:—In regard to shortages, can simply say respecting Toledo weights that we can refer you to people who ship grain to this market the year around and to people who buy grain here the year around who never have a shortage.

Yours very truly,

J. F. ZAHM & CO.

Toledo, Ohio.

MONEY FOR SOMEONE.

Editor American Elevator and Grain Trade:—I am not a regular grain merchant, my business being that of a manufacturer of barley, rye and corn malt, but I consider your paper very complete. Am glad to see good crops this year, as it means money for someone if not for Leiter, poor fellow.

Yours truly,

R. S. LUTZ.

Louisville, Ky.

CHANGE IN IOWA FIRM.

Editor American Elevator and Grain Trade:—The former firm of Smith & Northey dissolved partnership the first of February last, Mr. Smith retiring from the business, which is continued by me. Inclosed find subscription for your paper, which send me beginning with the August number.

Respectfully,

H. G. NORTHEY.

Alexander, Iowa.

MOST SHORTAGES DUE TO CARELESSNESS OF SHIPPER.

Editor American Elevator and Grain Trade:—We have had very few complaints regarding shortages, considering the volume of business. Most of them have been due to carelessness on the part of the shipper, such as leaky doors, using green lumber, or taking crippled cars. Occasionally a car would come with the seal broken, indicating that it might have

been entered while sidetracked, or at some junction point. The elevator scales here are examined regularly.

Yours truly,

C. A. KING & CO.

Toledo, Ohio.

SCALES ARE GENERALLY CORRECT.

Editor American Elevator and Grain Trade:—Shortages at terminal markets are sometimes caused by leaky cars or by transferring en route, but we incline to the opinion that the trouble generally lies with the weighmaster at one end of the line or the other. The scales are generally correct.

Yours truly,

P. B. & C. C. MILES.

Peoria, Ill.

COMMON CAUSES OF SHORTAGES.

Editor American Elevator and Grain Trade:—Various things may cause shortages. Some of the most common causes are leaky cars, carelessness in weighing at both ends, and the condition of the weather. I ship to different markets, but the most aggravating shortage I have had was at Baltimore, Md.

Yours truly,

JOSEPH ULREY.

La Place, Ill.

GRAIN DEALERS' NATIONAL ASSOCIATION.

Editor American Elevator and Grain Trade:—The date for holding the annual meeting of the National Grain Dealers' Association has been fixed for November 2 and 3 at Chicago. The place of meeting has not yet been determined upon. We wish you would make this announcement in your next issue.

Respectfully yours,

WARREN McCRAE, Prest.

Kentland, Ind.

RECEIVERS AND SHIPPERS SHOULD CO-OPERATE.

Editor American Elevator and Grain Trade:—In order to rid the trade of competition with the scalpers, the shippers and receivers must fraternize. The receivers must refuse to handle grain from scalpers. In return, the shippers must stand by the faithful receivers and give them the bulk of shipments.

H. A. CARLETON.

Cawker City, Kans.

WOULD LIKE TO USE WRITTEN CONTRACTS.

Editor American Elevator and Grain Trade:—I have not used written contracts with farmers for several years on account of sharp competition from dealers who did not use them. I would prefer to use them if all grain men would use and enforce them. It seems that our association has never taken up or discussed this matter, and therefore it would be hard to get them to use them.

Yours respectfully,

WM. BURKE.

Friend, Nebr.

SHORTAGES DUE TO POOR CARS AND CARELESS TERMINAL WEIGHING.

Editor American Elevator and Grain Trade:—We ship to several markets, principally Peoria, Nashville, Evansville, Louisville and Henderson. We do not find much difference in shortage, but all are sufficiently large. I believe that part of our shortage is due to poor cars and careless weighing at the terminals. I do not think the condition of the atmosphere affects the grain at all.

Yours respectfully,

J. H. UPPENDAHL.

Dalton City, Ill.

SHORTAGES AT VARIOUS MARKETS.

Editor American Elevator and Grain Trade:—I have not been at this place long enough to say how my grain will weigh out, but I will give my experience while at Carlton, Ill., on the C. & N. W. Ry.

I shipped grain from there to Chicago, Minneapolis and Milwaukee. The average shrinkage on 3 cars of ear corn to Minneapolis was 50 pounds. The average shrinkage on 15 to 20 cars of shelled corn to Milwaukee was 75 pounds, and on about 130 cars of corn and oats to Chicago it was 300 pounds. The principal shortages occurred on grain sold on track or f. o. b. where it was weighed by city weighers or the purchasers.

I shipped a car of oats to two different commission firms, and some months apart. They happened to

be weighed by the same city weigher, and one car shrank 1,200 pounds, and the other 2,000 pounds.

I cannot see how the dampness or dryness of the atmosphere would affect the weight, unless it affected the scales. I cannot account for the large shrinkage except on the supposition that it is stolen in one way or another, or through the faulty system of weighing. I think if the system used in Milwaukee was employed in Chicago there would be fewer complaints.

Respectfully,

ROY WAKEFIELD.

Neponset, Ill.

CORN WILL SHRINK IN HANDLING.

Editor American Elevator and Grain Trade:—We ship grain to nearly all markets, and find that the shortages are about the same as Ulrich & Sons reported in your July number. We have found Toledo weights very good, and better than Chicago or Peoria. In Louisville our shortages are very large. Do not think that the condition of the atmosphere has much to do with it. It is, however, a fact that a carload of grain unloaded into an elevator and loaded out again on the same day will fall short. Somehow corn by being handled loses in weight.

Yours truly,

SMITH-HIPPEN CO.

Pekin, Ill.

SOME LARGE SHORTAGES.

Editor American Elevator and Grain Trade:—I ship mostly to Peoria, but some to Chicago. I have shortages in both places, but more in Peoria than Chicago. I shipped a load of corn to Peoria and it was only short 5 bushels. I rejoiced when I found it out, as the cars are generally short 10 to 15 bushels. A few days ago I shipped 2 cars on which the shortage was just 25 bushels.

I do not think the weather has anything to do with shortages, unless it may be that bad weather makes elevator men cross and they feel more like stealing than when the weather is nice. It may affect some men in this way.

Respectfully yours,

M. SCHOONMAKER.

Reynolds, Ill.

ST. LOUIS WEIGHTS GENERALLY SATISFACTORY.

Editor American Elevator and Grain Trade:—In regard to shortages at receiving points, will say that our principal shipments have been coming from Iowa and Nebraska. Once in a while there is a complaint, but not generally.

The grain arriving over western lines from above sections is weighed generally on wagon scales when hauled from track. When shipped beyond it is weighed on railroad track scales and return weights checked on this basis. Taking it all around, we think that with care on the part of shippers, loading in cars in good condition, that the weights in the St. Louis market will compare favorably with others.

Yours very truly,

DANIEL P. BYRNE & CO.

St. Louis, Mo.

CAUSES OF TERMINAL SHORTAGES.

Editor American Elevator and Grain Trade:—Referring to the matter of the cause for so many short weights between the country stations and the terminal markets, we believe a great deal of the shortage is caused by leaky cars and poor grain doors. We notice a great many of our certificates of weights have attached to them the remarks, "Leaking at the door," or at some part of the car.

We also believe that in a great many cases the weights furnished by the country shippers are guesswork, as they know they must settle on terminal weights anyway, and so do not take the trouble to weigh. A great many still depend on the wagon scales, and sometimes there are many loads to a car, while here the contents of the whole car is weighed on a hopper scale. It would therefore seem reasonable to say that there is less chance for a mistake at this end. We also notice that all of our shippers who weigh on hopper scales have good results in their weights, the shortage very often being of only 10 to 50 pounds. We think it would be to the interest of every country shipper to have, if

possible, a hopper or railroad track scale, where he could weigh a whole car at once, or at least in not more than 2 or 3 drafts.

Yours truly,
Chicago, Ill.

NO COMPLAINT ABOUT SHORTAGES.

Editor American Elevator and Grain Trade:—We have read and carefully noted the letter of Messrs. Ulrich & Sons in regard to shortages. We ship to quite a number of markets, and have no more cause to complain of one than another. We surely have no complaint against Chicago, notwithstanding we have had some exceptionally heavy shortages there. The difference, however, was too much for a shortage. It was plainly an error.

In our opinion, the chief cause of big shortages in any market is one of these three: Lack of facilities for handling the business in a businesslike way, carelessness, and incompetent weighmen. We do not think that the dampness or dryness of the atmosphere has anything to do with the shortage.

Yours truly,
Wenona, Ill.

CAUSES OF SHORTAGES.

Editor American Elevator and Grain Trade:—As to the chief cause or causes of shortages between country stations and terminal elevators, would say that in our judgment the cause in most cases lies in the inaccuracy or carelessness of the country elevator men in weighing, as but few country elevators have the proper facilities; or, when cars are scarce the country merchant overloads, some of which spills out in transit. Some country merchants keep tally of the number of wheelbarrow loads they put into a car as a basis of weight. Our country elevators seldom, if ever, have cause for complaint where the grain is consigned to terminal elevators under control of the state at Duluth or Minneapolis; we expect a better price if we ship to private houses or houses not weighed by state weighmaster.

Yours very truly,
Minneapolis, Minn.

ANNUAL MEETING OF THE NORTHWEST IOWA GRAIN SHIPPERS.

Editor American Elevator and Grain Trade:—The Grain Shippers' Association of Northwest Iowa had an enthusiastic annual meeting on July 19. Everybody was feeling first-rate. Crop prospects are fine and prospects for good prices and lower rates are thought to be the very best. The finances of the Association are in good shape, and the friendly contest with the railways in the courts is in good shape. The meeting was wide open—no secrets.

All of the old officers and directors were re-elected with the following exceptions: Geo. O. Holbrook of Onawa, Iowa, succeeds F. G. Butler as assistant secretary, and Ira Conger of Galva succeeds E. A. Abbott on the Executive Committee.

All grain men consider your valuable journal as a necessary adjunct to the successful conduct of their business.

F. D. BABCOCK, Secretary.
Ida Grove, Iowa.

WRITTEN CONTRACTS OF SALE CAUSE LOSS OF TRADE.

Editor American Elevator and Grain Trade:—We have tried the plan of taking a written contract for all grain bought. It happened to be at a time when grain graded poorly, and we had trouble in enforcing our contracts. Our competitors did not demand them, and it is our conviction that had we demanded written contracts during a year's business our trade would have been at a dead standstill, because the majority of farmers would not give written contracts when they could sell their grain without them.

Written contracts would undoubtedly be a great help and save the dealers a large amount of money if all would enforce them, but some buyer, thinking he might hold a certain trade, would become lenient; afterward, he would take contracts only in exceptional cases, and later none at all. His competitor, who in the meantime is enforcing his contracts,

finds out too late that the farmers have all sold to the other man.

We may be on the wrong side, but think that the taking of written contracts would in the end injure the solid interests, unless a law could be enacted whereby all verbal contracts for the delivery of grain valued at more than \$50 could not be enforced, no matter how they were made.

Yours truly,
J. A. AUGSPURGER & SON.
Farmer City, Ill.

TERMINAL ELEVATORS NOW PAY THISTAX.

Editor American Elevator and Grain Trade:—During the present month (July) we sold to a Chicago grain commission firm four cars of grain f. o. b. Mt. Pulaski, Chicago weights and inspection. We have recently received account purchase for the grain in which we find the following charges:

Weighing, 15 cents per car.....	\$0.60
Inspection, 25 cents per car.....	1.00
Tax, 25 cents per car.....	1.00

The weighing and inspection charges are all right, but we fail to find in the revenue lay any authority for the tax of 25 cents per car. If the tax charge is justifiable, what assurance have we that the government receives any portion of it, no stamp being affixed to the account purchase? Will you please publish for the benefit of the trade your opinion in this matter.

Yours truly,
Mt. Pulaski, Ill.

CHICAGO WEIGHTS HAVE IMPROVED.

Editor American Elevator and Grain Trade:—We notice E. R. Ulrich & Sons' letter regarding shortages in the last issue of the "American Elevator and Grain Trade." Our shortages have averaged considerably larger at Chicago than any other shipping point. Thus far since the appointment of the present weighmaster, Mr. H. A. Foss, our shortages have been very small. We understand that Mr. Foss intends to change his deputies from one weighing station to another at the end of every week. If this be true, we think the country grain dealer will be better satisfied with his weights.

We ship a great deal of grain to Toledo, and have been well satisfied with the inspection and return weights.

We do not think the dampness or dryness of the atmosphere can affect the shortage, especially when loaded within 75 miles of Chicago, and the cars are in transit but two or three days. We think the atmosphere will affect the grade to a certain extent.

Yours truly,
Emington, Ill.

SHORT WEIGHTS AT DIFFERENT MARKETS.

Editor American Elevator and Grain Trade:—We read the letter of Messrs. E. R. Ulrich & Sons, published in your July number, and at the time compared it with our shipments and found the results much the same.

We find considerable variance in weight on grain shipped to the same points, but weighed on different scales. As a rule, we find elevator weights at Chicago do not give satisfaction, and we try to avoid them as much as possible.

The cause of these short weights is hard to determine, but our opinion is that it is the fault of the weigher and not the scale, as we do some business with strictly private houses whose weights are very satisfactory.

We cannot see how the condition of the atmosphere could have any effect on the weight of a car of corn which is sealed at point of shipment and not opened until it is inspected or switched to the elevator for unloading.

Cincinnati has the worst record for short weights that we have on our books, cars ranging from 10 to 106 bushels short, which caused us to quit shipping there altogether. We get better weights at Newport News than any place we ship to, and we prefer to ship there at one-half cent under other bids, as we figure we are making money by so doing.

We think the constant agitation of this question of short weights by the "American Elevator and Grain Trade," and the work of the Illinois Grain

Dealers' Association in trying to secure the repeal of the elevator law, is doing a vast amount of good, and in fact, is the only thing that "keeps the wolf from the door" of the much imposed on country grain dealer.

We think our Association should meet in Chicago once a year, as meetings there are productive of much good.

Oats are a poor crop this year, yielding about one-third of an average crop. Corn is looking fairly well, but was damaged a good deal by the recent dry weather.

Yours very truly,
THE SIDELL GRAIN & ELEVATOR CO.,
By J. H. Herron.
Sidell, Ill.

ENFORCING WRITTEN CONTRACTS WITH FARMERS.

Editor American Elevator and Grain Trade:—We have at times made written contracts with farmers, depending somewhat upon the quantity and time for delivery. When we have made contracts, either written or verbal, we have enforced them whenever possible. Do not think that a dozen contracts out of those we have made in the last five years have been defaulted, and those only for small amounts. We never have any trouble on a steady market, but usually find on an advancing market that the farmer didn't have as much as he supposed he had, and the opposite on a declining market. In the first case we deduct the difference between the market and the contract price from his pay, and in the latter, of course, pay only the market for the surplus. We always make a written contract on any deferred delivery, as it leaves no room for any misunderstanding. In making verbal agreements, we always make a written memorandum which we read to the seller and keep in our office.

As far as we can see it has not hurt our business a particle to insist on having what we buy. It makes some men hot, but they sell to us the same as ever. Some dealers seem to think they must carry farmers around on a chip, and furnish bags and free storage, etc. We think that a written contract is the best thing, and have often thought of having some printed especially for our business.

Very truly,
Blissfield, Mich.

CARELESS METHODS OF SHIPPERS CAUSE SHORTAGES.

Editor American Elevator and Grain Trade:—There are a number of reasons why shortages occur at the different terminal markets. We believe, as a general thing, more care is taken in weighing stuff at terminal markets than at points of shipment in the West; for the reason that we have better appliances for weighing, and the scales here are apt to be more correct, being tested, we understand, every two weeks by officials appointed by the state for that purpose. In the West a great deal of the grain is received during a rush, and weighed by different parties all over the country, and the scales are apt to be out of order. Our experience is, less care is taken.

The experience of the writer is, from observation and traveling through the West, that the ordinary grain buyer at a country station, during the rush of grain, trusts the weighing to some inexperienced person. We have known a great many instances where they receive the wheat from wagons and load it right into the cars; that they directed the driver of the wagon to unload his wheat into a certain car, and it is no unusual thing for the driver to load in a different car from the one directed. This you see is going to make a mix in the weight at once.

Then you might take the regular elevators at some of the large towns throughout the country; for instance, Springfield, Ill. We have not had very much experience from there, but the same thing will apply to such places—that the same care is not taken in weighing stuff as in the East.

Of course, a great many shortages occur by defective cars or want of proper inside doors, or both. This is, perhaps, one of the worst evils the grain shipper in the West has to contend with, and often,

when cars are scarce, a shipper will deliberately load his grain into a car that he knows at the time is unfit for grain. We think if the dealers throughout the West would be a little more strict with the railroad companies and insist on their putting cars in good condition before they loaded them, a great deal of this trouble from short weights and leaky cars might be avoided.

Of course, we do not claim the East is infallible; we never found any man yet who was not liable to make a mistake, such as transposition of figures, or taking the wrong amounts from the scale. Such things as this occur occasionally.

There is no doubt that shortages possibly may be caused by varying degrees of moisture or dryness in the atmosphere; but do not think it would make any material difference in the weights. Of course, in taking in new grain, say oats, they would dry out considerable, and possibly a carload of 1,500 bushels might lose by evaporation 500 pounds.

Yours truly,
E. L. ROGERS & CO.
Philadelphia, Pa.

WAREHOUSEMEN TO PAY REVENUE TAX ON RECEIPTS.

Editor American Elevator and Grain Trade:—Referring to the article headed "War Taxes on Grain Transactions," page 17 of your issue of July 15: In summing up the war tax on grain, you note a charge of 10 cents on inspection certificates, and 10 cents on certificates of weights. This, we think, you will find an error, since neither inspection nor weight certificates are required to be stamped.

Possibly it may be of interest to you to know that the question as to who shall pay the 25 cents taxes on warehouse receipts has been finally settled, and is settled so that that expense falls upon the elevator proprietors and not on the owners or consignees of the grain. This decision was brought about through the stand taken by our firm as against the Central Elevator Company, recently.

The Central Elevator Company conceded to the position taken by Gerstenberg & Kroeschell in demanding warehouse receipts properly stamped by them (the Central Elevator Company), according to the new revenue law.

It will be remembered that the said elevator company arbitrarily refused to deliver receipts for grain stored in their elevator by Gerstenberg & Kroeschell, unless the latter first paid to the elevator company the cost of the revenue stamp, 25 cents, which the new revenue law required them, the elevator company, to affix to their receipts.

Some ten days ago this firm preferred charges against the Central Elevator Company, asking the directors of the Board of Trade of the city of Chicago to declare the receipts of the Central Elevator Company irregular, for the reason that they refused to deliver such receipts to Gerstenberg & Kroeschell, which was in direct violation to the laws of the state of Illinois.

To-day the elevator company conceded the position of Gerstenberg & Kroeschell, as stated, and have delivered to them receipts for grain stored in the Central Elevator, the receipts being properly stamped by the elevator company.

This means much for the country shipper, inasmuch as previous to this date all elevator companies have insisted that the consignees of grain reimburse the elevator proprietors for the expense of the stamp, which necessitated a charge of 25 cents to the country shipper on every receipt for grain issued by the elevator companies. The country shipper will be much pleased to receive this report, since many of them have already received account of sales of grain, with the additional charge of 25 cents for revenue stamp on elevator receipts.

Several of the elevator companies have now notified the trade that they will return to them the amount paid heretofore by the commission merchants for the stamps on receipts, so that the country shipper who has been charged for stamps on elevator receipts will, no doubt, receive remittance from their commission merchants for the amount so charged up to the present time.

We think this a very important item which might well be incorporated in your next issue of the "American Elevator and Grain Trade," which

reaches the grain trade throughout the country so generally.

Yours truly,
GERSTENBERG & KROESCHELL.
Chicago, Ill.

CARELESS UNLOADING A CAUSE OF SHORTAGES.

Editor American Elevator and Grain Trade:—We notice the communication in your paper from Ulrich & Sons, Springfield, Ill. It is a pretty difficult matter to say what is the cause of this shortage. One of the greatest troubles is in loading defective cars. We have been receiving a great many cars in our elevator, and we find on an average that one-third of them are leaking at the grain doors when they arrive. We should not be surprised if in a great many cases when they go to public elevators this fact is overlooked, and the company's attention is not called to it, thus the shipper loses any chance to make claim on the railroad company for this shortage.

In the last year there has been quite a demand for grain cars, and very few companies had enough cars to fill contracts, consequently there seemed to be quite a scramble to get cars to load in. In some cases they loaded cars that were really not fit to load grain into. A great many of the large cars are so lined inside that quite a lot of grain will work between the weatherboarding and the side of the car, and unless the parties who unload the cars are very careful to see that this is all removed, there could be a loss in this direction. The writer has seen quite a number of cars that have been unloaded, and he feels sure that there was at least five bushels of grain left in the cars. We believe this trouble is the most serious one.

We also believe that there is quite a difference in weights on account of defective scales. Receiving the amount of grain that we do in carload lots, and noticing the variation in weights, we are in a position to know that this cuts quite a figure in the matter. We have had a great many cases where the cars always overrun, while we have a great many that always fall short. We firmly believe that if shippers were more careful in loading and selecting the cars, and the receivers at this end would be more careful in unloading, this matter of shortage would be largely obviated. We are sorry that we cannot give a more definite answer in regard to this matter.

Yours respectfully,
L. F. MILLER & SONS.
Philadelphia, Pa.

ONE EFFECT OF LEITER DEAL.

Editor American Elevator and Grain Trade:—One of the peculiar effects of the Leiter wheat deal has come to light in Washington. Each branch of the government purchases its own supplies, and all purchase more or less forage. Some departments have more horses than others, in fact, some have but two or three, while others have a hundred. The entire quantity purchased is small in any event, yet the officials are very careful of the money they expend. It should be understood that these remarks do not apply to the army or navy, where, particularly in the former, the quantities are large.

The law applying to the executive departments provides that the Secretary of the Treasury shall notify the heads of other departments of the date when they shall open bids. All proposals are opened on the same day, and at the same hour. The day for the present fiscal year was May 5 last. When each department has scheduled the bids and made their recommendation the bids, schedules and recommendations are forwarded to a board consisting of one of the assistant secretaries of the treasury, one of the interior, and one of the assistant postmasters general. This board considers the various proposals and relative prices and recommends the acceptance or rejection of the proposals.

While the articles purchased cover a large number of items, yet for comparison the figures for oats will serve to indicate how the government, in buying its yearly supply, saw fit to reject all bids for grain and grain products; bids for hay and straw being accepted. When asked why grain bids were rejected (and they were rejected after the collapse

of the Leiter deal), it was said, "why, on May 5 wheat was bringing a dollar and a half a bushel. Look at it now! We can save money by readvertising." And they did.

The following table shows the lowest bids for oats for the various departments, as seen in the proposals for May 5, and the lowest figures on readvertisement in the latter part of June:

Department.	First Proposal.	Second Proposal.
A, per 100 pounds.....	\$1.22	\$0.96
B, per 100 pounds.....	1.19	.99
C, per 100 pounds.....	1.18	.99
D, per bushel.....	.43	.32
E, per bushel.....	.39	.31
F, per bushel.....	.38	.29
G, per bushel.....	.34	.27

The quantities for each department vary from 420 bushels per year to 20,000 bushels. In each instance the government came out ahead, much to the chagrin of the bidder. The figures for corn and grain products bear about the same proportion.

And this, with the shrewdness of the Board of Awards, is one of the "things that Leiter did."

OUTIS.

Washington, D. C.

ASSOCIATION WORK IN NEBRASKA.

Editor American Elevator and Grain Trade:—Since the meeting here in June I have been very busy getting the Association affairs into good shape. I have been very successful in doing so, and can report a condition in Nebraska that is truly pleasing. Realizing that we had to serve so large a territory as we cover and give each dealer a direct benefit, the best method to handle it was seriously figured on, and as a result we have adopted the method of dividing the state into districts, these local meetings held in these districts being under the jurisdiction of the State Association and the Secretary, the membership composed of the members of the Association. We now have fourteen districts, and during the past month have held meetings in all of them, in some two meetings.

The benefits have been very apparent of getting together the dealers who compete with one another every day, to discuss the features peculiar to their district; and the acquaintanceship made and the discussion have brought about results that have given each dealer a direct benefit for being a member. By having these districts all under one head to hold one meeting annually for the general conditions of the trade, a result is attained which to my knowledge has not been attained in any other association, viz., a thorough organization that practically represents conditions, and an acquaintanceship between the dealers where needed, and at the same time creating a strong support for one channel as concerns conditions outside the state. These local meetings I hold from 30 to 60 days apart.

Another advantage gained is the great increase in membership, at the present time our membership having increased to 500 elevators out of a possible 700, and since the first of August 20 new firms have listed themselves. If this rate of increase is continued, and I see no reason why it should not do so, I believe the Nebraska Grain Dealers' Association will represent every elevator in the state.

The Association is being conducted with the idea that friendship begets friendship; treat the conditions that you have to meet with courtesy and friendship and they in time will treat you the same way. This policy is bringing far better results to the Association than any other policy I have seen tried. In no instance do we threaten or boycott, but by fair representations try to produce a condition whereby all factors we have to meet see that it is to their benefit to extend to us the same treatment that we extend to them.

I have given you the above conditions as they exist, and you may use them to lay before the trade the policy we are pursuing, and the results we are receiving. When I first took the Association I was not able to inform you as to the conditions, but after the past four months' work the above will plainly show you what is being done in Nebraska. We have no complaints to make, and the feeling is spreading throughout the whole membership that

the organization is all right, and that it is good to belong to it.

W. H. CHAMBERS,
Secretary Nebraska Grain Dealers' Association.
Omaha, August 8.

WEEVILS IN EASTERN OHIO.

Weevils have made their appearance in Eastern Ohio and Western West Virginia for the first time in thirty years. As a result of the spread of the bugs very little or no wheat will be planted this fall in the Ohio Valley. Big wheat growers say they will make no attempt to raise a crop next year, nor until the weevils have all been killed.—New York Commercial.

INSPECTION RULES.

With the beginning of each crop year there is frequently more or less modification of the inspection rules at primary points to meet the exigencies of the average qualities of the grain coming to those markets, the physical qualities of which, of course, are modified to some extent with each new crop. Inquiry of the proper officials as to changes made for the present crop has elicited the following replies:

Buffalo—C. H. Keep, secretary Buffalo Merchants' Exchange: "No changes have been made in the grading of grain for this season's receipts. If any are made hereafter I will notify you."

Milwaukee—Wm. J. Langson, secretary Chamber of Commerce: "No change whatever. By limitation the rule making No. 1 Northern the contract grade for wheat will expire. Nothing has been done so far to renew it. This, however, has nothing to do with the grading of grain, in which there have been no recent changes."

Minneapolis—G. D. Rogers, secretary Chamber of Commerce: "No changes made, and will not be until September 1, and I think none will be made then."

Peoria—R. C. Grier, secretary Board of Trade: "No changes made."

St. Louis—Geo. H. Morgan, secretary Merchants' Exchange: "No changes made as yet, and I do not expect any. The rules of the State Inspection Department are unchanged."

Hy. H. Smith, secretary of the New Orleans Board of Trade: "The only changes that have been made in the grading of grain since Oct. 1, 1897, are as follows: No. 2 Mixed Oats for Export—Shall be sweet, reasonably clean, and reasonably free from other grains. No. 2 Mixed Oats Clipped for Export—Shall be reasonably sound, well cleaned, and reasonably free from other grain, but may be stained, weighing not less than 34 pounds to the measured bushel."

W. W. Culver, chief inspector of grain, state of Kansas, office at Kansas City, Kans.: "We have not yet had our committee meeting for the purpose of making changes, if any, in the grading of grain for the season."

E. J. Noble, chief grain inspector, Chicago: "We have made no changes in the grading of grain for this season's crop, but I expect there will be one or two new grades made."

E. D. Bigelow, secretary Board of Trade, Kansas City, Mo.: "No changes in grade have been made in this market."

Owing to the very light weight of many of the new oats coming to the Chicago market, particularly from Illinois, the question of weight was recently a matter of contention between the receivers and shippers. The receivers petitioned the inspection department to have the inspection rules remain as they are, giving no stated weight. In other words, they believed all oats that are sound should be classed as high as possible, irrespective of weight. The shippers and buyers in the market in general thought oats of the lighter weight should be classed accordingly. The Board of Railroad and Warehouse Commissioners, after due consideration, decided to make the minimum weight of No. 2 White and No. 2 oats at 28 pounds to the bushel, and of No. 3 White and No. 3 oats at 22 pounds to the bushel.

There has been some agitation on the Chicago Board of Trade of the question of making a new grade of wheat which shall be known as No. 2 Northern Spring of hard variety. It will be of a grade that cannot get into No. 1 Northern, but which at present goes into No. 3 Spring. As there is often a difference between No. 1 Northern and No. 3 Spring of from 3 to 5 cents, it is considered by many that the new grade would be desirable.

A SOUTH DAKOTA ELEVATOR.

The grain warehouse has been one of the most potent forces in the settlement of the Northwest. Practically all the wealth of what is curiously enough called the "Northwest" produced by settlers has been agricultural products requiring care and transportation to turn them into money. Most of the settlers in the newer states were attracted thither not for their health nor for the scenery, but to better their material condition. The railroads and the warehouses are the two elements that have rendered settlement possible and profitable.

Our illustration shows one of the houses found all over the West. It is located at Tripp, S. Dak., and is owned by T. J. Connolly, successor of Serris & Connolly in the grain business at that place. The house is 30 by 60 feet in floor dimensions and 16 feet high. It has a capacity of about 14,000 bush-



A SOUTH DAKOTA ELEVATOR.

els. It is a good example of the type of warehouse that has made it possible to handle the enormous crops of grain that have flowed from the Northwest for the past fifteen years. They have no elaboration of machinery, as a rule, except in the older settled parts of the country; but they are an absolute necessity, not only to the people but to the railroads.

A SMALL GRAIN DRIER FOR ELEVATORS.

Every elevator man has more or less use for a drier to use on damp and wet no-grade corn and wheat. Sometimes from accident, but oftener through force of circumstances, the elevator man must handle grain which has so much moisture in it as to render it unfit for grinding or to place in store. A drier in such cases becomes a necessity unless the prospect of certain loss is to be faced; while on the other hand the possession of a drier enables the grain man to handle at a profit lots of grain that otherwise he would not care to handle at all.

Elevator men generally will, therefore, be interested in the announcement elsewhere in this issue of the Paine-Ellis Grain Drier Co. of Milwaukee. In placing their machine before the public they found a very widespread demand for a small drier at a reasonable price. This demand came not only from elevators of moderate size, but even from large concerns that have only occasional use for apparatus of this kind.

To meet the wants of this class of customers who want a drier capable of handling from 1,000 to 1,500 bushels of damp or musty grain in 24 hours, they have placed on the market a complete machine which occupies but little room, and can be put in at small expense. All that is required to operate the drier is a 10 to 15 horse power boiler, and in most cases the exhaust steam from the engine driv-

ing the elevator will furnish all the heat necessary so that about 5 horse power to operate the fan is all the additional power required.

It is not our purpose in this connection to describe the drier in detail, but simply to call attention to the fact that a drier of the capacity named is now on the market. For a complete description of it the reader is referred to the Paine-Ellis Grain Drier Co. We may remark, however, that the operation and capacity of the drier are guaranteed, and that it is sold with this understanding. The condition of much of the grain this season, as every season, in fact, will, no doubt, stimulate inquiry respecting this drier, which has been subjected to the test of actual use and endorsed by many leading grain men. The company will take pleasure in answering all inquiries.

SCREENINGS.

The most conservative figures on this season's surplus of wheat in the Columbia River basin and Willamette valley are 1,050,000 tons.

"John, I'd like to have \$50. I want to do some shopping." "Maria, I haven't 50 cents. I went shopping yesterday myself." "What?" "Bucket-shopping."

Indiana hopes to at least duplicate her corn crop of last year—123,040,950 bushels. At the same time the farmers appear to be everywhere preparing to feed twice as many hogs and cattle as they did last year.

Wheat aphid is reported from a number of points in Palouse County, Washington, and is believed to have caused the failure of a 1,200-acre lot of Oregon white winter near Garfield, Wash., not otherwise explainable.

The last of Leiter's holdings of wheat in America—5,000,000 bushels in the Northwest, and 900,000 in Chicago—was closed out August 8 by Peavey & Co. at Minneapolis, August 8, at 88 cents. It had cost Mr. Leiter \$1.50.

Supervising Inspector Smiley at Chicago, on the basis of earlier arrivals of winter wheat, says that crop, as a whole, is neither remarkably good nor remarkably bad; the samples of spring wheat have been fine; oats are light weight.

The Sac and Fox Indians raised 200 acres of good small grain this season, which they themselves harvested with self-binders. The starting of the binders was made the occasion of a feast by the agent, at which some fifty or more Indians were present. And thus endeth the passing of the Wild Indian who twenty years ago was still "some pumpkins" in Kansas and the West!

The last echo in the Northwest of the Leiter deal was the transfer of \$107,000 of the assessment for taxes on the Republic Elevator Company at Minneapolis, from that company to Joseph Leiter. The elevator company claim that he and not they was the owner of the wheat assessed. So it seems that, in the language of the poet, you may break or shatter this corner if you will; but the scent of the deal will hang round it still!

The wheat exports of Baltimore during the past fiscal year increased 15,000,000 bushels, or 250 per cent over the previous year. Baltimore's ocean tonnage increased during the year by 26 per cent, or 427 vessels. The business of exporting grain is gradually working southward, owing to shorter railway hauls and lower transfer charges at South Atlantic and Gulf ports, but in spite of efforts to divert such business from Baltimore the port has done rather better than hold her own.

Early shipments of grain in Washington will be graded according to last year's rules, as the state grain commissioners will not meet until September 20. Meantime the state grain inspector is gathering samples from different parts of the state on which to base the new grades. The inspector says that the whole crop will average higher than ever before, but that he does not believe the state grain commission will attempt to raise the grades. Very little grain is coming to market in the state now.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

MITCHELL BROS. COMPANY

(INCORPORATED.)

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CHICAGO, ILL.

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HARLEY B. MITCHELL, - - - Editor.

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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., AUGUST 15, 1898.

Official Paper of the Illinois Grain Dealers' Association.

RUSSIA'S GRAIN CROPS.

The fact that Russia has been America's chief competitor in the wheat markets of Europe has been father, in these days of much discussion of foreign affairs, to various prophecies of Russia's influence in the grain markets of the immediate future. The physical magnitude of Russia stuns the mind, indeed; but material greatness and industrial greatness are by no means synonymous, as so many of our phophets imagine. There are many physical and social conditions which make it difficult to predict what Russia may do, which cannot be named here. But it is well to remember that Russia lacks both railways and capital to move crops for long distances and to insure their proper distribution, as in America, at places, first at home, then abroad, where the grain is needed for consumption. We have seen the anomaly of certain Russian districts exporting grain, while other districts not far distant suffered from starvation. In a properly constituted industrial system, exportation would and does depend wholly on the local needs.

In Russia, as the country develops, such an equitable distribution of food will probably take precedence over exportation. Russia's population is now increasing very rapidly in the wheat area of the southern governments, and as this population increases in material prosperity it may be expected to consume more wheat and export less. This part of the empire being already quite densely populated, a large increase of wheat area can hardly be expected there, while the farther the crop is grown from the seaports the more difficult it will be to get it to European markets, except at times of very high prices, and even then Russia has failed to respond to demands upon her. Were

Russia bathed in the American atmosphere, a vast industrial and agricultural expansion, with concurrent railway and ship building, might be expected; but Russia is Russia in this respect. Her Tsar is building for war, not commerce. Wherefore the American wheat grower need feel no serious alarm from that quarter, at least for the present.

THE SHORTAGE QUESTION.

Our department of "Communicated" is rich this month in letters having reference to the shortage question. Both receivers and shippers have given their views, and this consensus of opinion is probably as fair a statement of the conditions of the case as is likely to be obtained.

Several possible causes for short weights at terminals, other than stealing, have been offered by our correspondents, such as leaky doors, crippled cars and over-loading of cars insufficiently lined, etc., the baldest of physical conditions which can easily be avoided by all shippers; but the fact that these causes are so much dwelt upon gives color to another assigned cause of no mean proportion, to wit, the carelessness of the shipper himself. Ware & Leland suggest that as "country shippers know they must settle on terminal weights anyway" they do not take the trouble to weigh. Indeed few country shippers, as is suggested by another writer, have facilities for weighing, and they guess at weights. In the busy season some grain never goes into the elevator at all at many stations, but is unloaded from wagons into cars, and when several cars are so loading a mix is morally certain to occur.

These are but a few of the suggestions commended to the country shipper, who is thus reminded that at his place of business and with his facilities for weighing, the personal equation is a more than considerable factor in this question.

There are, of course, rascals in the grain business at terminal points, as at interior points, but the proportion is not out of line, and the liability to human error is as great in the country as in the city, appliances being equal. The thought occurs, then, that the most pointed feature of the correspondence is the frequent reference to this ubiquitous element of carelessness, and neither city nor country has a monopoly of the commodity.

FARMERS' ELEVATORS.

This is "a private country," as the schoolboy remarked, and any man or set of men is free to enter any business he chooses so long as he complies with the law. Nobody questions the right of the farmers to organize a company and operate an elevator if they see fit, provided they have the money, subscribe for the "American Elevator and Grain Trade" and otherwise comply with the necessities of the case. In fact, an item can be quoted from this very issue of one farmers' elevator company that has declared a dividend of 50 per cent on its capital stock. This experience has evidently been attractive, for a number of similar projects are announced.

Now it is not our purpose to discourage such enterprises or question the ability of farmers to operate them successfully. It is a fact, how-

ever, that most of these farmers' coöperative elevators have not been successes in the past. An article elsewhere in this issue from a Minnesota paper points out the failures that have occurred in that state. They do not fail because the people are against them or the railroads down on them, nor because farmers are incompetent, but because coöperative enterprise is rarely successful in this country. The successes are few. In almost every instance they are due to some one man of excellent ability, who runs the business as if it were his own and who is fortunate enough to be let alone. In other words, coöperative elevators succeed under the same conditions as a private individual business succeeds. They fail from the contention and strife that seem to be the portion of coöperative effort in this country. They are too often started under the misapprehension that the profits of the business are excessive. Small results lead to suspicion and charges of mismanagement, and the end is an elevator for sale or in the sheriff's hands.

ARE YOU MAKING IMPROVEMENTS?

Our news columns bear ample testimony to the fact that not only are new elevators being built everywhere in the grain states, but that old ones are being put in better shape. The improved condition of business which has shown itself in the increased use of paint on dwelling houses is manifesting itself in more substantial but less visible ways in elevators, mills and other establishments, where improvements have been deferred, perhaps more from sympathy with the feeling of general depression than from actual lack of means to make them. Possibly a survey of what others are doing may point the way to improvements, the lack of which one overlooks from force of habit.

Perhaps first of all the protection of the property from outside hazards should be considered. Metal roofing and sheathing at once suggest themselves as guards against locomotive sparks, as well as contiguous fire hazards. Wire screens in the windows should not be forgotten, which not only keep out sparks, but birds as well. Metallic paint may serve as a substitute for the former. The question of power comes next. Is your power satisfactory and cheap? If not, have you considered the numerous types of gasoline engines which are adapted for use where intermittent power only is required? Many have found it satisfactory to retire the old horse and worn-out steam boiler. Perhaps a similar investment would add to your profit and convenience.

Inside the house have you guarded against danger of fire from elevator heads on shafts out of line? Has your machinery been accommodated to the inevitable settling and shrinking? Perhaps a few days' work by a competent mechanic or machinist would save money and trouble. Is your dump satisfactory or does it need tinkering or replacing with a better one?

Would it pay to put in a feed mill? Could you use an oat clipper and would it not pay you to put in better cleaning and shelling machinery? How do you load your cars? Can't you make it easier and cheaper with the appliances to be had. Have you ever thought of a drier as a money-maker? How much longer

will your elevator buckets last and what sort of a geometrical figure do they look like?

There are plenty of ways of spending money advantageously on your plant, if you have it to spend; some for profit, some for convenience and many for both.

AGAINST AMERICAN PRODUCTS.

The so-called "agrarians" in Germany have broken loose again and cable dispatches assure us that the next session of the Diet and Reichstag will witness another vigorous assault on all American agricultural products. It had been supposed that the recent German elections had given the agrarians as backset; but apparently they are getting ready for one supreme effort, the rallying cry for which will be hostility to all agricultural produce coming from this country. They are already proving to their own satisfaction that American pork is 146 times more trichinous than the German article; that American flour is adulterated with "mineraline;" that American preserved meats are unfit for food; that American corn is used to adulterate beer, and so on indefinitely, the logic of which is that American food products should either be prohibited or taxed so heavily as to insure being kept out of the Kaiser's dominions.

Our readers, quite as much as the farmers, are interested in keeping foreign markets open. The antics of the radical agrarians indicate that we may soon have to face a trade war of serious proportions. The position of Austria is almost identical with that of Germany. Apparently both governments are looking for trouble along trade lines. We are sorry, because it is an axiom that while it takes two to make a quarrel, one can make trouble when he wants it. The prospect of a trade war is not pleasant.

THE LONG AND SHORT HAUL AGAIN.

The Interstate Commerce Commission, in a Texas case, has repeated its rulings upon the long and short haul, knocking out again the theoretical railroad rate-maker's idea that the tariff should be based on distance.

The case referred to was the controversy between the Dallas Freight Bureau and the T. & P. Ry. Co. The bureau complained that the rate from New Orleans to Kansas City via Dallas was less than the rate to Dallas, an intermediate point, holding such a rate to be a violation of the Interstate Commerce Law. But the Commission said it was not, for the following reasons:

The complainant bureau conceded that the rate, New Orleans to Dallas, was reasonable. This being so, Dallas had no cause for complaint. The rate to Kansas City, however, is determined by other considerations than the rate to Dallas. In the first place, Dallas is an interior point with comparatively few roads, while Kansas City has water communication with New Orleans and besides has unusual railway connections. The defendant railway, the Texas & Pacific, in making its rate New Orleans to Kansas City is lawfully entitled to take these facts into the computation, the Commission say, without in any way considering the Dallas rate, the railroad being, in the very

necessity of the case, compelled to meet the competition conditions as they exist, or else wholly withdraw from the traffic.

The higher rate to Dallas is, therefore, lawful in the view of the Commission, who, in their decision, follow the ruling of the Supreme Court in the Alabama Midland Ry. Co. case, where it was held that "in determining whether circumstances and conditions are substantially similar, competition between railways subject to the act as well as competition not subject to the act should be considered."

CALAMITY HOWLER OUT OF DATE.

The "calamity howler" in the West is having a hard time holding his audience, nowadays. Statistics are against him. The bulls may try to cut down the Kansas wheat crop, but John W. Breidenthal of Topeka, who made a good guess last year, claims for this crop a total greater by 10,000,000 bushels than last year. In 1897 the state was credited with 50,000,000 bushels, but Mr. Breidenthal thinks, from the way wheat came out of hiding during the Leiter deal, that that crop was nearer 60,000,000, making 70,000,000 for the crop of 1898. It may not bring as much money as did last year's crop, but as last year's receipts paid off the debts this year's receipts are expected to stay at home to start new banks, farmers furnishing the capital.

DOES THE WEATHER AFFECT GRAIN WEIGHTS?

Quite an authority in matters relating to cereal production has suggested that the weather may have an influence on the shortage question that is entirely overlooked. Judging from the consensus of opinion, both of receivers and shippers, this view does not appear to have supporters, yet we think it is worthy of consideration. Experiments have repeatedly been made to determine the shrinkage of grain, and the uniform result has been to establish the fact that grain "shrinks," or fails to shrink, according to the weather when the initial data are taken and at the successive times of weighing. For instance, ten sacks of oats weighed 1,272 pounds August 1, as they came from the thrashing machine. January 1 they weighed 1,316 pounds, a gain in weight. A sack of corn weighed every month showed very peculiar variations in weight. It is no new theory that grain absorbs and parts with moisture readily. Will not some elevator man with proper facilities experiment for a period of time covering dry and wet weather and see how much there is in the suggestion?

A dispatch from an Ohio town states that farmers "continue to go shy of that town" when they market their grain, because "the grain dealers belong to an association that refused to loan sacks to the farmers"—this having reference to the agreement mentioned in our last issue between the dealers and millers of Northwestern Ohio and Eastern Indiana not to loan bags. It is added that the merchants of the town are feeling the boycott keenly, as the trade is going to other towns. The remedy for that is easy. Let the merchants buy sacks and loan them to the farmers themselves.

ASSOCIATION WORK IN THE WEST.

The value of association work depends wholly upon its results. Associations for the purpose of locating the treasure at the end of a rainbow or for dividing the harvest moon into individual portions of schweitzercase doubtless have their attractions, but practical grain men are not, one apprehends, of that class of association devotees. The organic character of successful associations will, in like manner, depend largely upon the results desired and upon the ease or difficulty of obtaining them; that is to say, they will be large or small, local or general, in aim and membership, as the objects sought to be accomplished are far-reaching or comparatively local in their effects.

The existing grain dealers' associations of the Western States are properly state affairs, or at least as individual bodies cover areas as broad as not inconsiderable states. The inclusion of such spaces is necessary to secure the combined force of numbers, and the influence of many interests united to accomplish a common purpose. And yet the results sought to be obtained by association work are, in the first instance, entirely local in effect, and in certain most important particulars are to be secured only by the most particularized local action. The power and influence of numbers and combined interests may force reforms of methods at terminal elevators, but no influence of mere numbers can per se persuade the grain buyers of a certain town or district to "be good" unless such course seems to each to be profitable.

For this reason the secretaries of the Kansas and Nebraska associations, seeing, as they doubtless do, that men's interest in those associations and their estimate of their value to them are gauged wholly by the pecuniary results obtained for them as individuals, have of late turned their attention to the work of organizing small local associations, which are intended to keep individuals in good fellowship with themselves, to induce them for business reasons to treat each other decently and on the basis of "live and let live." Half a dozen country grain buyers will throw away more money in a month in a petty contest to get the grain away from each other than many lose by short weights or other terminal abuses in a lifetime, and it is the part of a successful association to put a stop to this sort of idiocy whenever and wherever it can be done. The secretaries named have found by experience that an association, acting through small local associations, can do more work in this line and build up the general body at the same time, than by depending solely on the influence of the larger body. Where, therefore, the main results of association work are those which affect small groups of individuals most directly, the favorite associations will be the small or local ones, taking in a portion of a line of road, or a county, or the radius of, say, twenty-five miles from a given cross-roads station, leaving to the larger association the work of adjusting matters which may be of a more general interest, however important they may be to individuals in the long run. It is difficult to interest busy, practical men in generalities. First get them interested in the concrete and all the rest will come in due season.

EDITORIAL MENTION

Harvesting golden grains in the States has been paying better the past two years than washing out grains of gold on the Klondike.

It's good advice: "Don't pick a quarrel before it is ripe." Wait until the secretary gets a chance to come into your neighborhood to "fix it up."

Some of the able editors might spare themselves their fear in regard to the seventeen-year locust. It does not eat grain, grass or vegetation; it is another member of the family that does that.

A glance at our news columns this month will show that there is "something doing" in the elevator line. As a matter of fact, we have never known greater activity in elevator building and refitting.

The logical thing for England to do is not to build granaries to store enormous supplies of wheat pending a war that may never come, but to keep her navy up to the standard set by Dewey and others.

In view of the recent improvement in weights at the Kansas City houses under suspicion a month ago, it is surmised by Kansas shippers that those houses have heard what the wild waves are saying.

Bloom Sons, 406 Magazine Street, New Orleans, send us a sample of the first receipts of the new crop rice of the season 1898-99. The editor is not a rice expert, but the sample strikes him as unusually fine.

The Toledo Market Record states that a great many grain cars have arrived there in bad condition; in which Toledo is no different from other markets. Leaky cars, like the poor, we have with us always.

Insurance men say that the depletion of stocks of grain has cut down their lines materially; but, on the other hand, in the farming states they are collecting premiums on grain that is being held by farmers until prices suit them.

The locomotive spark has again gone into business as an incendiary of elevators, and we notice that a Janesville elevator was only saved by prompt action of the fire department. Roofs should be metal clad wherever possible and wire screens should also be placed at windows.

The Kansas City Board of Trade are too generous. They ask the Western grain dealers' associations to put their own weighers in the elevators to watch the official weighers, the dealers to stand the expense themselves. As the complaints of short weights at that market have been pretty well narrowed down to particulars, it would seem as though the Board's

power over the elevators might be great enough to call those few houses to terms at their own expense—seeing it would cost nothing in cash.

If reports from all the markets are true, and they agree, the winter wheat farmers are not yet ready to sell at current prices. And what is more, some of them are well able to hold their wheat and thus do a little speculating in the actual stuff.

The Kansas Grain Dealers' Association is still gaining new members, having added 25 during the past 30 days. Local meetings will be held at Coffeyville, Saturday evening, August 20, and at Wellington, Wednesday evening, August 24.

Some of the marine insurance companies took the risk of insuring that cargoes of wheat should reach French ports before the restoration of the old duty should go into effect. That seems more like a gambling venture than legitimate insurance.

The explosion in the starch works at Hammond, Ind., serves as a reminder that ought to be heeded, that the dust of anything that will burn will explode under certain conditions. The elevator is not exempt. Keep it as free from dust as possible.

Thin lumber should not be used for grain doors. Examination of cars on track shows that when the boards are light they bulge out, making a crack through which the grain leaks. Good thick lumber should be used and the doors made so as to fit the car.

The next annual meeting of the Grain Dealers' National Association will be in Chicago, November 2 and 3. In a subsequent issue details of the program, with notice of the place of meeting, and other information desirable for members to know, will be published.

An Indiana Supreme Court decision denies the right to give warehouse receipts upon one's own property in his own possession to secure a debt, even if the party is a public warehouseman. This apparently extraordinary decision was given in the case of the Franklin National Bank vs. Whitehead.

The tax of 25 cents per car alluded to in the letter of Messrs. Wood & Kautz, Mt. Pulaski, Ill., was charged at first against the grain, but as this was clearly wrong, the elevators receded and paid the tax themselves. It is a tax which the country dealer should not pay. The law did not contemplate that the tax on warehouse receipts should be paid by the distant shipper who had parted title to the grain.

In Southeastern Ohio and across the river in West Virginia farmers are worried about the appearance of weevil. Of course this does not affect this year's crop, but farmers are alarmed for next year, fearing a repetition of the weevil scourge of many years ago. At that time the pest multiplied year after year until wheat raising was given up in disgust. Nothing checked them until one night a heavy frost caught the weevil without their winter

clothes on and froze every mother's son of them to death. Incidentally it killed nearly everything else; but the weevil have not been heard of in Southeastern Ohio from that time until this year.

Brother F. D. Babcock of Ida Grove, Iowa, is turning things over with the Rate Review, the organ of the Rate League of Iowa. He puts lots of logic, law and ginger into the little sheet, and grain men who read it will have a better understanding of the railroad question.

They tested the elevator scales at Kansas City last month. They found them all right. But they ought to have tested the fellows that handle them for color blindness, examined them in arithmetic and subjected them to other civil service manipulation. Perhaps that would have revealed something.

A Syracuse paper has sprung a sensation in claiming that the grain shovelers at Buffalo are compelled to patronize the saloons owned by the elevator bosses to the extent of \$2.00 apiece or lose their jobs. As a rule, the average grain shoveler doesn't need any compulsion to drink two dollars' worth of beer a week.

The American Machinist says it knows of one gas engine company that expects to adapt its engine to the use of powdered coal. With improved appliances for burning corn, Russian thistles, bran, corncobs, etc., the fuel question is not as pressing as it used to be. Almost any old thing will do for fuel.

The grain storage capacity of Manitoba is being largely increased this summer by the erection of new elevators. This was hardly expected in the light of the agitation in the province against the alleged privileges enjoyed by the big elevator companies. Evidently the need of enlarged facilities was imperative.

It is acknowledged now that one of the elements in the wheat bulge last spring on the European side was the fear that the war would blockade American ports and cut off supplies from this country. This seems very funny now, in view of the fact that the only real difficulty the war presented was locating and getting at the enemy.

It seems like old times to hear of grasshoppers stalling trains in the West. For the instruction of incredulous Eastern people, it may be stated that the grasshoppers don't make breastworks across the tracks and thus stop the engines, but that the glutinous pulp of the crushed grasshoppers greases the track so that the wheels slip.

The lightning has been playing high jinks generally this summer, and as usual, barns and granaries are the chief targets. Lightning certainly seems to have a fondness for receptacles stored with hay and grain. An Indiana paper says: "Farmers should not store wheat, vehicles, agricultural implements and large quantities of hay in their barns. It is too risky." The wheat, of course, he ought to sell; but after he has stuffed his hay into the bed-ticks and moved the harrow into the parlor,

what use would he have of a barn? The horse and bicycle could go in the cellar, and thus the need of a barn would disappear, and along with it the danger of destruction by lightning. But suppose the lightning should get out a search warrant for the hay?

Secretary Stibbens, of the Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri, writes that the Union is gaining in membership and strength every day. The next general meeting of the Union will be held at Council Bluffs, Iowa, in the latter part of September or early part of October, the exact date not being fixed as yet.

Don't you think this is a pretty good paper for a dollar a year? Isn't it worth that much to you? If it is not, will you write and tell us why? We will take your criticisms or suggestions in good faith; they may be valuable to us. If the paper does meet your approval send us your name and address with the dollar, "not necessarily for publication," as the editor of the Bugle remarked, "but merely as an evidence of good faith."

Secretary F. D. Coburn of the Kansas State Board of Agriculture deserves to be outlawed, burned in effigy or otherwise severely punished. He actually states that a man cannot estimate the wheat crop of Kansas by traveling across the state at 40 miles an hour, or by taking a day off and figuring. This is a dangerous heresy and should be stamped out. How in the world would Mr. Coburn estimate crops if he disparages the good old ways?

Manitoba grain dealers are beginning to have their worriment, which for the present takes the form of the buyer who goes to the country to solicit business from the farmers. This interesting subject for a conservatorship used to operate quite freely in the States, but he is become much less important year by year as grain buyers get wisdom born of experience. Manitoba is hardly out of the scalper age yet. A good association might be of use up there.

Everything comes round to them who wait, even to the grain shippers of Northwestern Iowa, it seems. These shippers have been for years asking for a reduction of railway rates to a reasonable basis—20 per cent to be specific; and on August 4, after 101 these many days, the Interstate Commerce Commission gave their attorneys a hearing for argument on the evidence that has been submitted at various times during the past six months. The case has been taken under advisement.

The British parliamentary committee, appointed to inquire into the question of national wheat stores or granaries, has made its report and professes itself to be "profoundly impressed with the immense importance of such concerns as an aid for national defense." It recommends the appointment of a royal commission to deal with the matter. The establishment of granaries on such a vast scale as the movement contemplates would create a constant factor of importance in the world's grain trade. We do not see how it could be

accomplished without the government's becoming the controlling, perhaps the sole, interest in the British grain trade.

Some of the insurance companies were all torn up over the proposition made in the Northwest to allow assignments of grain policies, thus virtually doing away with short rates in grain insurance. Short term grain insurance is some of the velvet enjoyed by the insurance companies, and they won't give it up in a hurry, until competition forces them to. But the abolition of it is pretty sure to come in time.

We confess to some confusion of ideas as to Russia and Russian competition in wheat growing, from newspaper reports. Here is one magnifying Russia and incidentally calling attention to Siberian wheat fields as a part of the "Giant of the East." And here is another, based on the report of the American consul at Moscow, that the Russian Government has under consideration a proposition to forbid the exportation of grain owing to the failure of the crops and the small amount on hand.

The Mail of Toronto editorializes to the extent of a column on "Our Old Barley Market," said market being the United States. Its conclusion is that it is not much of a market anyhow. If our memory serves us, about eight years ago the Canadian papers were having hysterics every day about the American barley market; and we inferred that the Canadian farmer would go to raising ice and living on snowballs if his barley were shut out from the States. Apparently he survives; time has meliorated the grief of the papers, and the Mail concludes that we are not of much account.

The conviction of a bucketshop keeper in Chicago is an epoch-making event, of course. But one has a sneaking suspicion that the epoch will be recorded rather by the lawyers than the general trading public. For Barnum used to say, and he knew men pretty well, that the people delight in being humbugged; and so long as there are those who want to be humbugged by bogus grain and stock commission houses, it is pretty certain those gentry will find a way of maintaining a prosperous existence. However, that is no reason for letting the bucketshop live too easy a life.

The railroad reporters tell us that President Hill of the Great Northern road is talking of building a deep sea slip and elevator on the Pacific Coast to handle wheat, and that Mr. Hill has impressed himself with the idea that the wheat which is now shipped exclusively in sacks can be handled more cheaply in elevators. No doubt it could, but if we are rightly informed, wheat is handled in sacks on the coast for the reasons that experience with local conditions has approved that method as the best to prevent heating, while the English shipping laws require grain crossing the equator to be sacked. And as English ships carry out the bulk of the Pacific Coast wheat exports, shippers have simply adjusted themselves to that requirement. However, Mr. Hill has done wonders in some other respects, and the proposed scheme has immense possibilities.

IN THE COURTS

The Short Risk Grain Company of Minneapolis has brought suit against Eben T. Osborn, its president, to recover \$4,182.33, a sum which the complainants allege he has converted to his own use.

The R. T. Davis Mill Company of St. Joseph, Mo., has sued the George Ripke Grain Company of Salina, Kan., to recover \$400, alleged to have been advanced to the grain company by mistake over and above the contract price of a lot of grain purchased, which grain was not delivered according to contract.

The Lake Erie & Western Railroad Company has brought suit against Paddock, Hodge & Co. at Kokomo, Ind., to obtain possession of the elevators standing near the company's depot at Kokomo. The company claims ownership of the property, evidenced by a lease executed by defendants in 1895 which has now expired.

The Scioto Valley Grain Company at Chillicothe, Ohio, has recovered a judgment against the Scioto Valley Railroad Company (now Norfolk & Western). The grain company claimed that on a promise of low rates they were persuaded to remove their elevators to Chillicothe, but that, having done so, the railroad company advanced freight rates and greatly damaged their business.

The Venice Elevator at Venice, Ill., a part of the property of the elevator trust called variously the St. Louis United Elevator Company and the Consolidated Elevator Company, was sold July 30 for \$54,000, to C. H. Albers of St. Louis, who bought and brought suit by virtue of his possession of \$54,000 worth of the bonds of the old Venice Elevator Company, an indebtedness assumed but never protected by the St. Louis United Elevator Company. The sale is made subject to a decision of the Court of Appeals, to be reached in September next. Mr. Albers has secured control of the Advance Elevator, also part of the St. Louis United Elevator Company's property, in a similar way.

James Orth has begun suit at Milwaukee against the Globe Elevator Company to recover \$3,750 damages claimed through the elevator company's failure to fulfill a contract. Mr. Orth claims that February 21, 1898, he bought 30,000 bushels of No. 2 Northern wheat at \$1.04½, to be delivered at Buffalo "within ten days." The grain was not delivered, it is alleged, and the suit is brought to recover the profit based on the market price of wheat delivered in Buffalo as agreed. It is stated that on the trial of the case it will be necessary for the court to place a construction on the expression "within ten days." The complainant alleges that it means ten days after the opening of navigation at Duluth, Minn., the point of shipment, and that he made a demand for the grain within ten days after the date of the opening of navigation at Duluth, and failed to receive his property, which has not yet been delivered to him.

Northwestern Iowa is beginning "to get back on the maps" again, and in consequence a number of new elevators are being heard of in that country.

A local association of members of the Kansas Grain Dealers' Association was recently organized at Frankfort, Marshall County, composed of dealers on the Missouri Pacific and Central branch of the U. P. roads. Meetings will be held monthly.

Timothy Williams, a grain dealer at Beaver Dam, Wis., was in the habit of keeping a gun in his office loaded for rats. The other day it was knocked over by his dog, and one barrel discharged. The load struck Mr. Williams in the left knee, making amputation above the wound necessary.

The Glucose Sugar Refining Company reports having used between Aug. 2, 1897, and June 30, 1898, 20,616,861 bushels of corn, from which were produced 542,100,000 pounds of glucose, 120,572,000 pounds of starch, 2,600,000 dextrin, and 167,788,000 pounds refuse. The company's profits for the year were \$1,862,157, after writing off for betterment of plant, etc., the sum of \$598,152.

Trade Notes

Willis Wright, Blandinsville, Ill., has been granted a patent for a pneumatic grain elevator.

Chicago dealers in grain-handling machinery are crowded with work and some of them see no chance for a let-up until December.

Nordyke & Marmou Co., Indianapolis, Ind., report that business in all their departments is satisfactory; that, in fact, they are unusually busy.

Huntley Mfg. Co., Silver Creek, N. Y., write us that there has been no cessation of activity in the Monitor Works and that their elevator trade has proved very satisfactory indeed.

The Link-Belt Machinery Co. of Chicago has been experiencing, during the past few months very large sales of its Evans Wagon Dump, in addition to its regular trade in grain elevator machinery and supplies.

The Johnson & Field Mfg. Co. of Racine, Wis., report that they have been very busy during the past four months in supplying the trade with their Racine Dustless Grain Separators. The foreign demand has been especially good while the home trade has constantly increased and they are running full time to fill orders.

The Weller Mfg. Co. of Chicago announces in a neatly printed card that it has made the record of 95 per cent increase in its business for the first six months of 1898, over the corresponding period of 1897. As the firm's line of grain handling and power transmitting machinery is now both modern and complete in every particular they expect to make a corresponding good record during the remaining six months of 1898.

The Frontier Iron Works, Detroit, Mich., are making some additions to their plant to take care of increasing business. They report the sale of a number of their Frontier Tandem Gasoline Engines, some for electric lighting plants. The company claims for this engine a regulation equal to that of the steam engine, adapting it to electric lighting and similar duty, at a decided economy of fuel and attendance.

G. W. Richardson and O. F. Sias of Sparta, Wis., have invented a new grain separator, which has been patented. Its distinctive feature is the separation of oats and wheat. The machine is without screens, their place being taken by an endless belt or apron provided with strips of white wood in which are pockets to receive the wheat, while the oats are carried to a receptacle at one side by means of a revolving brush.

Among our callers the past month was Mr. C. N. Howes, president of the Invincible Grain Cleaner Co., Silver Creek, N. Y. Mr. Howes expressed satisfaction both at the volume and prospects of the cleaner trade. The Invincible Works have been driven to full capacity, and the trade will be double that of last season. The popularity of the Invincible Separators and Oat Clippers has been a large contributing element to this satisfactory record, a great many having been sold the present season.

The Dodge Manufacturing Co. of Mishawaka, Ind., has recently sent out to the trade a good sized sheet on which is very clearly portrayed the different sizes of shells which are thrown from the small and the big guns of the various vessels of our navy. The shells range from a one pounder with a diameter of about one and one-half inches to the 13-inch shells thrown from the battleships of the class of the Indiana and the Oregon. The illustration shows the length and weight of gun, weight and actual size of shell, amount of powder charge and the number of each class of guns on board the different war ships. Not the least attractive part of the sheet is a picture of the Dodge Manufacturing Co.'s works at Mishawaka and cuts of the various elevator appliances and machinery which the company manufactures. The Rice Machinery Co. of 166-174 South Clinton Street, Chicago, are sales agents for the Dodge Manufacturing Co.

and either firm will be pleased to send a copy of the sheet upon application.

We are in receipt of a letter from J. H. Tromanhauser of Tromanhauser Bros., Minneapolis, from Goderich, Ontario, where they are building a 500,000 bushel elevator for the Goderich Elevator & Transit Co. Work on the house has been progressing rapidly and the elevator when finished will be strictly up to date. The Mooers Co.'s elevator at Kingston was also built by Tromanhauser Bros. and was started up some time ago.

The S. Howes Co., Silver Creek, N. Y., write us: "We are glad to say that we are running our factory day and night to keep up with orders. We have had the largest run of orders, during the last couple of months, that we have had for some years past, thus showing the popularity of 'Eureka' grain cleaning machinery with millers and others requiring grain cleaning machinery." With the large and competent staff employed by the S. Howes Co., they are placed in a position to fill orders promptly and turn out machines whose standard character has been acknowledged everywhere.

The Riter-Conley Co. Pittsburg, has received the contract for the erection of the boiler and engine houses and coal storage sheds for the City of Mexico Tramways. The boiler house will be 55x78 ft., the engine house 51x78 ft., and the coal storage plant, 75x78 ft. The plant will be of 2,000 horse power, with room for extension. The buildings will be of steel. Another notable contract is that for an addition to the plant of the Schoen Pressed Steel Company, Allegheny. The building is to be 705 feet long, with a span of 120 feet. It is to be constructed of steel, with roof and sides of corrugated sheet steel.

We learn from the Winnipeg Commercial that Mr. A. Atkinson, grain dealer in that city, has invented a grain storage system which promises to be of great advantage to Manitoba farmers. His device consists of a portable galvanized iron grain tank. This tank can be placed on skids and moved about easily by one horse. At thrashing time it can be moved out to the field, where it will serve as an immediate receptacle for the grain direct from the thrasher. It is fire proof, weather proof and vermin proof, and will provide either temporary or permanent storage for grain at a much less cost than lumber granaries. A larger size on the same principle can be constructed for use at railway stations. Mr. Atkinson has also invented a small portable elevator for use in connection with these tanks.

The official Gazette of the United States Patent office for July 19 devoted fifty pages of its one hundred and eighty pages of description, to the series of twenty-five patents issued Tuesday to Francis H. Richards of Hartford, Conn., for inventions relating to automatic weighing machines. These patents are part of a series, more than two hundred in number, and having in the aggregate over five thousand claims. One patent of the present issue has 158 claims, a larger number, probably, than before granted to any one in this art. Another case relates chiefly to electrical apparatus for recording, and for controlling the movements of the several operative devices of the weight mechanism, and is the pioneer patent in this line. All of these patents, it is understood, have been taken out in the interest of the Pratt & Whitney Company, by whom Mr. Richards was retained for this purpose several years ago.

RECEIPTS AND SHIPMENTS AT CLEVELAND.

The receipts and shipments of grain, hay, etc., at Cleveland, Ohio, during the month of July, 1898, as compared with the same period of the preceding year, were, according to F. A. Scott, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	231,585	135,411	194,971	89,519
Corn, bushels.....	543,438	66,612	480,522	33,068
Oats, bushels.....	525,812	184,909	317,407	220,938
Barley, bushels.....	2,100	44,787	None.	None.
Rye and other cereals.....	14,242	120,833	279	8,638
Baled Hay, tons.....	3,968	2,906	359	781
Flour, barrels.....	34,950	40,140	14,780	29,730

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since July 15 has been as follows:

July.	NO. 2 H.W. WHT.		NO. 1 H.W. WHT.		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 1 N.W. FLAXSEED	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15.....	74	75 1/4	86	86	32 1/2	33	23 1/4	23 1/4	48	48	104 1/4	104 1/2
16.....	75	75 1/4	86	86	33 1/4	33 1/4	23 1/4	23 1/4	48 1/2	48 1/2	102 1/4	102 1/2
17.....	76	76 1/4	88	88	33 1/4	34	23 1/4	23 1/4	48	48	101	102 1/2
18.....	76	76	88	88	33 1/4	34	23 1/4	23 1/4	47 1/2	47 1/2	102	102
19.....	81	81	81	81	33 1/4	34	23 1/4	23 1/4	47 1/2	47 1/2	100	100
20.....	79 1/2	79 1/2	83 1/2	83 1/2	33 1/4	34	23 1/4	23 1/4	47 1/2	47 1/2	98	98
21.....	78	78	83 1/2	83 1/2	33 1/4	34	23 1/4	23 1/4	47 1/2	47 1/2	98	98
22.....	78	78	83 1/2	83 1/2	33 1/4	34	23 1/4	23 1/4	47 1/2	47 1/2	98	98
23.....	78	78	83 1/2	83 1/2	33 1/4	34	23 1/4	23 1/4	47 1/2	47 1/2	98	98
24.....	74 1/4	74 1/4	76	76	34 1/4	34 1/4	24 1/4	24 1/4	45	45	94	94
25.....	70	70 1/4	73	73	34 1/4	34 1/4	24 1/4	24 1/4	45 1/2	45 1/2	93	94
26.....	70	70	71	71	34 1/4	34 1/4	24 1/4	24 1/4	45 1/2	45 1/2	90	90
27.....	70	70	71	71	34 1/4	34 1/4	24 1/4	24 1/4	45 1/2	45 1/2	90	90
28.....	67	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	43	43	90 1/2	90 1/2
29.....	65 1/2	66 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	42 1/2	42 1/2	90 1/2	90 1/2
30.....	65 1/2	65 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	42 1/2	42 1/2	90	90
31.....	65 1/2	65 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	42 1/2	42 1/2	90	90
Aug. 1.....	65 1/2	65 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	42 1/2	42 1/2	90	90
2.....	66	66 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	42 1/2	42 1/2	90	90
3.....	68	68	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	44	44	90	90
4.....	68 1/2	68 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	44 1/2	44 1/2	90	90
5.....	69 1/2	69 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
6.....	69 1/2	69 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
7.....	71	71 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
8.....	72 1/2	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
9.....	72 1/2	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
10.....	72 1/2	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
11.....	72 1/2	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
12.....	72 1/2	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
13.....	72 1/2	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90
14.....	72 1/2	72 1/2	83 1/2	83 1/2	33 1/4	34 1/4	23 1/4	23 1/4	45 1/2	45 1/2	90	90

During the week ending July 15, Prime Contract Timothy Seed sold at \$2.55 per cental; Prime Contract Clover Seed at \$4.75; Hungarian at \$0.50@0.60; German Millet at \$0.55@0.65; buckwheat at \$0.90@1.00 per 100 pounds.

During the week ending July 22, Prime Contract Timothy Seed sold at \$2.55 per cental; Prime Contract Clover Seed at \$4.85@5.30; Hungarian at \$0.50@0.60; German Millet at \$0.55@0.65; buckwheat at \$0.90@1.10 per 100 pounds.

During the week ending July 29, Prime Contract Timothy Seed sold at \$2.55 per cental; Prime Contract Clover Seed at \$5.25@5.30; Hungarian at \$0.50@0.60; German Millet at \$0.55@0.65; buckwheat at \$0.90@1.00 per 100 pounds.

During the week ending August 5 Prime Contract Timothy Seed sold at \$2.55@2.57 1/2 per cental; Prime Contract Clover Seed at \$5.25@5.35; Hungarian at \$0.50@0.60; German Millet at \$0.55@0.65; buckwheat at \$0.90@1.00 per 100 pounds.

RECEIPTS AND SHIPMENTS AT NEW ORLEANS.

The receipts and shipments of grain, etc., at New Orleans, La., during the month of July, 1898, as compared with the same period of the preceding year, were, according to Hy. H. Smith, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	339,500	342,351	155,829	162,351
Corn, bushels.....	410,339	374,258	352,295	387,595
Oats, bushels.....	183,616	331,527	None.	70,000
Rye, bushels.....	23,050	None.	23,050	None.
Rough Rice, sacks.....
Clean Rice, barrels.....	81,092	43,340	5,390	22,355
Flour, barrels.....

Following is Secretary Smith's report of the movement of rough and clean rice at New Orleans for the year ending Aug. 1, 1898: Receipts of rough rice, in sacks, 470,924, against 377,400 in the previous year. Shipments, 488,318, against 434,657 sacks. Receipts of clean rice, in barrels, 8,031, against 9,782. Shipments, 125,829, against 110,449 barrels. Total stock of rough rice Aug. 1, 8,572, against 25,966 sacks on Aug. 1, 1898. No. 1 clean rice, 3,278, against 3,675 barrels. No. 2 clean rice, 528, against 463 barrels.

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending Aug. 6, as compared with same weeks last year, have been as follows:

Articles.	For week ending Aug. 6, 1898.		For week ending July 30, 1897.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	2,686,000	1,655,000	1,675,000	1,268,000
Corn, bushels.....	2,588,000	3,401,000	3,063,000	1,776,000
Oats, bushels.....	385,000	843,000	1,280,000	1,782,000
Rye, bushels.....	75,000	284,000	437,000	129,000
Flour, barrels.....	215,400	256,000	173,400	252,600

RECEIPTS AND SHIPMENTS AT
PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the month of July, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	58,450	26,400	20,550	4,800
Corn, bushels.....	472,250	994,800	218,800	451,950
Oats, bushels.....	611,950	911,250	687,200	844,350
Barley, bushels.....	9,350	8,400	7,950	11,200
Rye, bushels.....	3,600	1,200		
Mill Feed, tons.....	750	185	1,695	6,358
Seeds, pounds.....				60,000
Broom Corn, pounds.....		60,000		30,400
Hay, tons.....	2,890	1,260	240	260
Flour, barrels.....	23,710	25,350	21,200	25,650
Spirits and Liquors, bbls.				
Syrup and Glucose, bbls.				

RECEIPTS AND SHIPMENTS AT
ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month of July, as compared with the same period of the preceding year, were, according to George H. Morgan, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	772,100	1,076,400	370,332	261,080
Corn, bushels.....	374,250	476,700	300,196	489,994
Oats, bushels.....	480,800	766,700	183,950	218,800
Barley, bushels.....	7,500	1,500	2,620	
Rye, bushels.....	1,400	7,700		32,139
Hay, tons.....	9,738	10,000	2,884	4,224
Flour, barrels.....	78,045	90,565	84,360	135,475

RECEIPTS AND SHIPMENTS AT
MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the month of July, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	1,271,640	3,730,800	680,720	694,530
Corn, bushels.....	262,020	111,820	81,160	4,830
Oats, bushels.....	344,090	1,297,570	145,940	212,320
Barley, bushels.....	9,270	103,270	8,060	113,390
Rye, bushels.....	50,680	90,720	44,140	45,900
Grass Seed, pounds.....				
Flaxseed, bushels.....	17,480	126,330	45,470	78,820
Hay, tons.....	2,227	30		10
Flour, barrels.....	4,427	7,916	892,553	1,088,418

RECEIPTS AND SHIPMENTS AT
CINCINNATI.

The receipts and shipments of grain and hay at Cincinnati, Ohio, during the month of July, as compared with the same period of the preceding year, were, according to C. B. Murray, superintendent of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	92,245	108,494	38,477	73,784
Corn, bushels.....	185,290	226,560	40,080	64,944
Oats, bushels.....	239,475	281,866	82,690	129,462
Barley, bushels.....		1,418		
Rye, bushels.....	3,299	6,011	576	389
Clover Seed, bags.....				
Timothy Seed, bags.....				
Hay, tons.....	4,791	3,996	3,861	2,269
Flour, barrels.....	80,513	119,237	49,835	90,207
Malt, bushels.....				

RECEIPTS AND SHIPMENTS AT
MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the month of July, 1898, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	318,395	503,440	17,855	92,250
Corn, bushels.....	525,200	84,500	938,825	13,000
Oats, bushels.....	525,000	897,000	901,050	750,265
Barley, bushels.....	42,400	364,800	27,438	176,144
Rye, bushels.....	55,400	131,575	29,200	214,318
Grass seed, pounds.....	360	30,000	24,000	48,000
Flaxseed, bushels.....	1,740	10,820	1,740	5,800
Hay, tons.....	1,291	1,191	12	59
Flour, barrels.....	130,230	156,000	171,141	293,973

RECEIPTS AND SHIPMENTS AT
DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the month of July, as compared with the same period of the preceding year, were, according to F. W. Waring, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	374,052	119,930	217,221	11,137
Corn, bushels.....	126,804	155,511	53,297	49,782
Oats, bushels.....	92,846	114,573		11,545
Barley, bushels.....		15,335		
Rye, bushels.....	15,645	17,626	24,380	24,114
Hay, tons.....				
Flour, barrels.....	13,100	32,500	9,600	11,150

RECEIPTS AND SHIPMENTS AT
TOLEDO.

The receipts and shipments of grain and hay at Toledo, Ohio, during the four weeks ending July, 1898, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	2,457,251	1,069,700	2,190,800	618,564
Corn, bushels.....	370,746	610,482	583,400	941,000
Oats, bushels.....	35,500	30,433	34,600	10,477
Barley, bushels.....				
Rye, bushels.....	17,049	34,676		
Clover Seed, bags.....	3,058		4,100	
Flour, barrels.....				

RECEIPTS AND SHIPMENTS AT
KANSAS CITY.

The receipts and shipments of grain and hay at Kansas City, Mo., during the month of July, as compared with the same period of the preceding year, were, according to E. D. Bigelow, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	2,027,350	2,567,500	1,071,200	886,600
Corn, bushels.....	742,500	847,500	478,500	611,250
Oats, bushels.....	221,000	268,000	31,000	89,000
Barley, bushels.....				
Rye, bushels.....	2,600	4,550	1,300	1,950
Flaxseed, bushels.....	3,500	9,500		3,500
Hay, tons.....	6,690	6,740	1,630	1,750
Flour, barrels.....			23,640	23,760
Brn. barrels.....				

RECEIPTS AND SHIPMENTS AT
SAN FRANCISCO.

The receipts and shipments of grain and hay at San Francisco, Cal., during the month of July, as compared with the same period of the preceding year, were, according to T. C. Friedlander, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, centals.....	183,023	665,846	141,660	570,637
Corn, ".....	5,685	14,945	2,367	5,221
Oats, ".....	32,225	34,760	2,582	1,485
Barley, ".....	80,465	384,533	17,323	117,760
Rye, ".....	1,857	5,356		
Flaxseed, sacks.....	1,379	326		
Hay, tons.....	14,050	22,698	358	742
Flour, barrels.....	80,098	106,431	45,394	67,513

RECEIPTS AND SHIPMENTS AT
BUFFALO.

The receipts and shipments of grain and hay at Buffalo, N. Y., during the month of July, as compared with the same period of the preceding year, were, according to Chas. H. Keep, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	3,450,000	3,777,936	3,108,100	
Corn, bushels.....	5,911,480	6,047,029	3,383,000	
Oats, bushels.....	4,057,589	7,586,931	3,061,000	
Barley, bushels.....	125,725	651,358	13,000	
Rye, bushels.....	434,055	874,294	474,500	
Grass seed, bushels.....	7,515			
Flaxseed, bushels.....	65,000			
Hay, tons.....				
Flour, barrels.....	626,021	1,372,628		

NOTE.—The receipts are by lake, while the shipments reported are those made by rail from the elevators.

Ware & Leland, Chicago, say that many mills are closed for want of wheat.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Aug. 6, 1898, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany.....		60,000	45,000		
Baltimore.....	352,000	676,000	90,000	26,000	
Boston.....	14,000	241,000	4,000		
Buffalo.....	432,000	738,000	303,000	11,000	168,000
do. afloat.....					
Chicago.....	806,000	6,822,000	791,000	106,000	
do. afloat.....					
Cincinnati.....					
Detroit.....	75,000	62,000	1,000	22,000	
Duluth.....	762,000	2,061,000	27,000	90,000	43,000
Indianapolis.....	456,000	7,000	5,000		
Kansas City.....	202,000	66,000	10,000	6,000	
Milwaukee.....	50,000			2,000	8,000
do. afloat.....					
Minneapolis.....	2,967,000	319,000	22,000	34,000	15,000
Montreal.....	54,000	70,000	813,000	17,000	26,000
New York.....	811,000	1,621,000	155,000	9,000	10,000
do. afloat.....		52,000	113,000		
Oswego.....					
Peoria.....	2,000	155,000	33,000	1,600	1,000
Philadelphia.....	31,000	287,000	52,000		
St. Louis.....	161,000	215,000	4,000	1,000	
do. afloat.....					
Toledo.....	204,000	218,000	46,000	27,000	
do. afloat.....					
Toronto.....	17,000		12,000		
On Canals.....	34,000	421,000	52,000		20,000
On Lakes.....	825,000	3,495,000	802,000	85,000	7,000
On Miss. River.....		30,000			
Total.....	8,254,000	17,920,000	3,352,000	427,000	298,000
Corresponding date 1897.....	17,650,000	16,514,000	6,551,000	1,632,000	831,000

RECEIPTS AND SHIPMENTS AT
CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during July, 1898 and 1897, of seeds, hay and broom corn:

Receipts.	Timothy, lb.	Clover, lb.	Other Grass Seeds, lb.	Flax-seed, bu.	Broom Corn, lb.	Hay, tons.
1898.....	172,850	192,550	133,110	74,822	388,620	15,662
1897.....	263,716	64,116	179,531	218,650	473,240	16,044
Shipments.....						
1898.....	465,480	10,642	256,823	83,421	114,455	709
1897.....	452,540	65,024	970,348	45,661	888,420	987

RECEIPTS AND SHIPMENTS AT
DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the month of July, as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Wheat, bushels.....	298,517	2,616,815	2,000,467	1,968,536
Corn, bushels.....	426,272	13,355	521,900	7,748
Oats, bushels.....	4,157	780,422	180,581	891,696
Barley, bushels.....	7,967	292,648		257,449
Rye, bushels.....	66,349	166,515	95,925	153,528
Grass seed, pounds.....				
Flaxseed, bushels.....	39,772	265,113	163,045	502,831
Flour, barrels.....	352,335	308,795	460,190	844,735
Flour production Duluth and Superior.....				

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the two years ending with July, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1897-98.	1896-97.	1897-98.	1896-97.
August.....	813,160	1,770,180	299,108	1,060,659
September.....	696,000	1,027,480	557,895	1,399,514
October.....	424,600	2,014,920	373,312	515,159
November.....	671,870	874,640	437,218	259,916
December.....	436,648	643,272	486,379	238,865
January.....	189,080	302,500	162,128	230,267
February.....	180,960	344,520	88,523	187,185
March.....	212,331	307,980	156,961	207,725
April.....	75,400	176,900	37,691	524,527
May.....	333,420	164,720	174,522	782,273
June.....	224,143	290,000	251,184	141,478
July.....	51,640	251,720	197,934	134,445
Total bushels.....	4,349,212	8,828,512	3,123,865	5,632,013

There were in store in regular elevators in Chicago, at the close of business July 23, 1898, 943,841 bushels of flaxseed.

The telegraph reports that on July 22 two trains on the Rock Island road were delayed near the West Kansas line by

ELEVATOR

GRAIN NEWS

J. F. Haviland is building an elevator at Tipton, Ohio.

M. Lewis has completed an elevator at Lewis, Kans.

O. M. Kelly of Dana, Ill., is building an elevator at Leeds.

A grain storehouse is to be built at Silverdale Station, Ont.

The K. C. Elevator at Manilla, Iowa, has been just completed.

Morris & Co. are building an elevator at Brewster, Minn.

There is talk of an elevator being located at New Paris, Ohio.

The Interstate Grain Co. succeeds J. Elvidge at Burt, Iowa.

Fred Thomas is to put in scales and buy grain at Alvan, Ill.

James McDowell's new elevator at Meriden, Ill., is completed.

Pinna Bros. are finishing their elevator at New Holstein, Wis.

Bussan Bros., Cuba City, Wis., are putting in the Dickey Cleaner.

Opie Bros. of Freeport will build an elevator at Apple River, Ill.

H. G. Porter of De Land, Ill., expects to remodel his elevator soon.

Sale & Ward have their elevator at Dewey, Ill., nearly completed.

E. A. Cowee has opened a second grain store in Worcester, Mass.

A large blower has been placed in Elevator A at Galveston, Texas.

The National Elevator Co. is erecting an elevator at Dumont, Minn.

R. K. Grant has built an addition to his elevator at Hastings, Mich.

The Interstate Elevator Co. is enlarging its house at Hubbard, Iowa.

An elevator will be built at Sanborn's Mill at Cherry Valley, Ill.

Beach & Son are building a store and grain building at Albion, Pa.

J. A. Cunningham is building a grain elevator at Washington, Iowa.

Eli Wise has gone into the grain buying business at Paw Paw, Mich.

G. W. Peper is building an addition to his elevator at Yuton, Ill.

Cressler Bros' new elevator at Scranton, Iowa, is about completed.

F. H. Peavey & Co. are building an elevator at Worthington, Minn.

Frederick Haas of Baltic, Ohio, has put in a Dickey Overblast Separator.

The Holstein Milling Co., Holstein, Mo., is putting in a Dickey Cleaner.

N. B. Wickware is building a 15,000-bushel elevator at Akron, N. Y.

Gault Bros., Cromwell, Iowa, have put in a Dickey Cleaner for fast work.

L. H. Perry is improving and enlarging his elevator at St. Anne, Ill.

Sleeper & Madill are building an addition to their elevator at Uby, Mich.

Mike Ott has completed a new dump at his elevator at Wilton, Iowa.

J. H. McSherry of Hutchinson is building an elevator at Plevna, Kans.

Schulte & Smith, Hopedale, Ill., have been remodeling their elevator.

D. K. Unsicker will build an elevator with two dumps at Wright, Iowa.

A. H. Linebarger is building an addition to his elevator at Stanford, Ill.

J. M. Hornung is building a grain elevator near his mill at Greensburg, Ind.

Coward & Monroe of Bronson, Mich., have leased the grain bins of the railroad company there, and

will build additional room and put in cleaning and elevating machinery.

O. C. Regan has purchased the Dunn-Howard Elevator at Diller, Nebr.

A. G. Schwanman of Gilmer is building an elevator at Lake Zurich, Ill.

L. C. Butler, Aiken, Iowa, has purchased a Dickey Overblast for his elevator.

At Lowell, Ind., C. E. Nichol's has purchased a Dickey Overblast Cleaner.

Rogers Bros' elevator at Carberry, Manitoba, is now owned by Wm. Hope.

The St. Paul & Kansas City Grain Co. will build an elevator at Tama, Iowa.

J. S. Harshman has sold his elevator at Donnellsville, Ohio, to T. W. Brooks.

The Geraghty Elevator at Shakopee, Minn., has been improved and enlarged.

D. C. Young is erecting a 40,000-bushel elevator at Ronneby, Benton Co., Minn.

Calvert's elevator at Ellis, Kans., is completed and ready for the new crop.

Rogers Bros. will build another elevator at their mill at McGregor, Manitoba.

R. R. Whitney, Aurelia, Iowa, has just put in a Dickey Overblast Separator.

J. A. Harrison & Co. have purchased the Linebarger Elevator at Stanford, Ill.

W. A. Chittwood has leased the elevator at River-ton, Nebr., of Richards Bros.

Riggs Bros. of Kent have their new elevator at Platte, Iowa, about completed.

Hubbard & Palmer have a new elevator at Ash Creek, Minn., about completed.

The Dickey Warehouse Grain Cleaners have been put in elevators at Wayne, Ill.

A 40,000-bushel elevator is to be built at Thurston, Nebr., by Peavey & Co.

E. M. Walbridge has leased and will operate the elevator at Castle Rock, Minn.

E. H. Vankirk & Co., Swaledale, Iowa, are putting in a Dickey Mfg. Co.'s cleaner.

The Fremont Milling Co., Fremont, Nebr., has put in a new Dickey Grain Cleaner.

L. L. Cass has his new elevator in operation at Milton Center, Wood Co., Ohio.

C. Raphael is to build a one-story brick grain warehouse at Los Angeles, Cal.

Hargreaves Bros. are building a 30,000-bushel elevator at Manhattan, Will Co., Ill.

The Dickey Mfg. Co.'s Overblast goes into one of the elevators at Lake City, Minn.

Hamlin Bros. have opened the elevator at Lennon, Mich., after making some repairs.

Moses Bros. Grain Co. of Great Bend, Kans., has completed an elevator at Heizer.

Montgomery & Lehrack have succeeded the Cook Mill & Elevator Co. at Cook, Nebr.

Chas. Tighe has succeeded A. L. Spearman in the grain business at Springfield, Neb.

The Omaha Elevator Co. has completed a 22,000-bushel elevator at Rockville, Nebr.

The grain and coal firm of Tuttle & Jenkins at Norwalk, Ohio, has been dissolved.

Hiestand, Warner & Co. of Oakesdale will erect a grain warehouse at Sunset, Wash.

The Hagadorn Elevator at Curtis, Nebr., is being enlarged by a 6,000-bushel addition.

The 120,000-bushel steel tank elevator at McKinney, Texas, was completed recently.

Conger & Beier have just put a new gasoline engine in their elevator at Fletcher, Ill.

W. T. Leslie has become a partner in A. R. Anderson's elevator at Elizabethtown, Ind.

Teesbank, Manitoba, has a new elevator built by the Canada Northwest Elevator Co.

S. Z. Waltz has rented the elevator at Berrien Center, Mich., for the coming season.

The Eagle Mills Elevator Co. is building a 25,000-bushel elevator at Lamberton, Minn.

M. O. Flanigan & Co. have been engaged in making extensive repairs to their elevator at Bedford, Ill.

A. W. Hageman, Mondamin, Ia., recently placed an order with the Webster Manufacturing Company for the necessary machinery to be used in his ele-

vator, which is being rebuilt. Mr. Hagerman's elevator burned a few weeks ago.

Schuler Bros. are preparing to erect an elevator 24x40 feet at Hopkins Station, Mich.

Walter Stickey has sold his grain and coal business at Warren, Ill., to Joseph Hicks.

J. A. Faris & Son are just completing a 20,000-bushel elevator at Flandreau, S. Dak.

Cooper Swigart has purchased of his father, Carl Swigart, the elevator at Weldon, Ill.

W. T. Oats has purchased the elevator at Oxford, Nebr., formerly run by J. E. Williams.

The Tacoma Grain Co. is to build a grain warehouse 30x150 feet at Ritzville, Wash.

G. W. Helm will rebuild his grain elevator at Longview, Ill., which burned recently.

The Montrose Grain Co., Montrose, Mo., has lately purchased a Dickey Overblast Cleaner.

R. A. Blake of Pierson, Iowa, has engaged with Hayton & Robertson at Washta, Iowa.

The Dominion Elevator Co. is building a 30,000-bushel elevator at Treherne, Manitoba.

D. M. Glasgow succeeds Glasgow & McLean in the grain business at Davenport, Wash.

The new elevator at Goderich, Ont., is expected to be ready for business by September 1.

Wedel & Co. have placed a new engine and boiler for their elevator at Moundridge, Kans.

The Cargill Elevator at Delano, Minn., is being overhauled and a gasoline engine added.

The Spencer Grain Co. is erecting a cleaning house near its elevator at Spencer, Iowa.

R. Turner & Son, Avery, Ohio, have just set up their second Dickey Overblast Separator.

John Goheen has completed a grain warehouse at Birdsboro, Pa., 30x40 feet, 3 stories high.

Ed. Kisser will build an oats elevator at Ludlow, Ill., 40x64 feet, with dump and elevator.

The Dickey Elevator Cleaners have been placed in the elevators at Schuyler, Nebr., recently.

The Michigan Grain Co. has been incorporated at Bay City, Mich., with a capital of \$5,000.

Mr. Howlitt has withdrawn from the grain firm of Howlitt & Vedder at Madison, S. Dak.

Hanson, Son have sold their elevator at Hampton, Iowa, to Felthouse Bros. of Mason City.

The old North Elevator at Moundridge, Kans., is being fitted up for business by Dan Jones.

Kenneth Campbell of Brandon, Manitoba, has a new elevator at Forrest about completed.

H. W. Crowell has purchased I. R. Stevens' grain and hay business at Newton Center, Mass.

The Labart Elevator is a new 30,000-bushel house now being built at New Rockford, N. Dak.

An elevator will be built at St. Jean, Manitoba, by the Dominion Elevator Co. of Winnipeg.

N. B. Updike, Harvard, Nebr., has purchased the Shelly-Westbrook Elevator at Thayer, Nebr.

J. B. Snel has placed a 30-horse power electric motor in his elevator at Clay Center, Kans.

A 36,000-bushel elevator is to be built at Dazey, N. Dak., by the Great Western Elevator Co.

The Imperial Elevator Co. will move its main office from Owatonna, Minn., to Minneapolis.

Jacobs & Brauer of San Jose, Ill., are building an addition to their elevator 16x32x20 feet high.

Wm. Perrizo is building an elevator at Delavan, Minn., to take the place of his old warehouse.

Bohumil Tmey has taken the management of Strong & Co.'s elevator at Hutchinson, Minn.

At Forreston, Ill., A. B. Puterbaugh has equipped his elevator with a Dickey Mfg. Co.'s Cleaner.

At Wyatt, Ind., the Dickey Overblast has been placed in the elevator of Hagey, Moore & Co.

A newspaper correspondent at De Witt, Ill., says a grain elevator is much needed at that place.

Burkitt & McIntyre have bought the elevator and grain business of C. H. Sells at Pittwood, Ill.

A. S. Heffner has sold his coal, grain and lumber business at Topton, Pa., to Levi A. Walbert.

The South Brooklyn Grain Co. is building an elevator at South Brooklyn, Cuyahoga Co., Ohio.

The temporary grain house of the Fitchburg Railroad at Charlestown, Boston, Mass., was crowded to its utmost during July, handling over 2,000,000

bushels of grain. The new million-bushel house is expected to be ready for use in November.

R. A. Grams is putting up an elevator on the Great Northern tracks at Hutchinson, Minn.

It is reported that the Omaha Elevator Co. will build an elevator at Kearney, Nebr., this fall.

The Columbia Distilling Co. of Waterloo, N. Y., has added large grain storage bins to its plant.

G. H. Elliott, Whiting, Iowa, has equipped his cleaning department with the Dickey Overblast.

Robert Booth will erect an elevator at Dryden, Mich., for which he will receive a bonus of \$600.

The Geraghty Elevator at Lakeville, Minn., is being enlarged and a new gasoline engine added.

The new elevator at Poseyville, Ind., belonging to W. D. Cushman & Co., has just been completed.

Clarence Miles, Hastings, Nebr., has leased the W. H. Ferguson houses at Hartwell and Phillips.

E. J. Eveleigh, Maherville, Kans., has placed in his house at Boyd a Dickey Overblast Grain Cleaner.

T. J. Knott & Son, Carbon, Iowa, have lately placed a Dickey Cleaner in their house at Corning.

At Washita, Iowa, Kennedy & Coulson have adopted the Dickey Overblast for general cleaning.

Rasmussen Bros., Milford, Iowa, have purchased the Dickey Mfg. Co.'s Overblast for their elevator.

J. W. Anderson has succeeded S. B. Samuelson & Co. in the grain business at Stromsburg, Nebr.

W. T. Bradbury has sold his interest in the grain business at Delana, Ill., to B. F. Baker of McLean.

W. H. Bartlett of Campbell, Nebr., has put his elevator in shape to handle an enormous new crop.

The Northwestern Grain Co. of Spokane, Wash., was incorporated recently with a capital of \$10,000.

Walter Stickney has sold his grain warehouse, coal business, etc., at Warren, Ill., to Joseph Hicks.

The Lake-of-the-Woods Milling Co. will probably build an elevator at Dauphin, Manitoba, this year.

Alexander & Williams, Hastings, Nebr., succeed David Black, Springbranch, Nebr., on the K. C. & O.

H. E. Rea & Co. have succeeded N. A. Mansfield & Co. in the grain and coal business at Tuscola, Ill.

Joseph Duvall's grain elevator at Kewanee, Wis., is being put in first-class condition for the fall trade.

D. R. Hopkins, Crete, Nebr., has equipped his elevator at Wilber with a Dickey Overblast Separator.

The Dominion Elevator Co. of Winnipeg is erecting a 30,000-bushel elevator at Indian Head, Assiniboia.

Adams & Gilbert, Weeping Water, Nebr., have sold their elevator to Calkins & Ireland, a new firm.

John Hanson of Leaf Lake, will buy grain for the Farmers' Elevator at Henning, Minn., this year.

The Grand Trunk Railway is building a large elevator at Forty-ninth Street and Homan Ave., Chicago.

C. A. Lyon & Co., Augusta, Ill., have purchased a new grain cleaner of the A. P. Dickey Mfg. Co.'s make.

The Cherokee Strip Grain & Elevator Co. of Ponca City, Okla., has been incorporated with a capital of \$2,000.

Bingham Bros'. elevator at Sioux Falls, S. Dak., is being remodeled and a dump scale and gas engine put in.

The Kay County Grain Co. has been formed at Blackwell, Okla., to buy and ship grain from that county.

N. K. Simmons & Co. are building a 15,000-bushel elevator at Rice, Minn., to replace the one recently burned.

The Ennis Cotton Oil & Ginning Co., Ennis, Texas, has been incorporated with a capital stock of \$50,000.

G. C. Fanton of Belle Plaine, Iowa, is improving his elevator and increasing its capacity about 3,000 bushels.

The elevator at the mill in Sedgwick, Kans., has been leased by the E. K. Nevlin Grain Co. of Wichita.

A. F. Campbell & Co., Hildreth, Nebr., have adopted the Dickey Overblast Separator for their elevator.

It is reported that negotiations have been completed whereby the Corle & Son Oatmeal & Cereal Co. of Kansas City becomes a part of the Ameri-

can Cereal Co. of Chicago. This is one of the largest cereal mills in the West.

W. C. Boorman of Waterloo, Wis., has purchased and taken charge of an elevator at Howard, S. Dak.

L. Simonton of Lebanon, Ohio, writes us that he expects to build a grain elevator at that place.

J. L. Moats at Huron, Ohio, has placed a new separator and a 4-horse power gas engine in his elevator.

The elevators at Wauneta and Palisade, Nebr., have been equipped with the A. P. Dickey Mfg. Co.'s cleaners.

The 60,000-bushel elevator at Roganna, Tenn., belonging to Hon. J. M. Head, is about ready for business.

A. P. Fellingham of West Side, Iowa, has made repairs on his elevator preparatory to handling the new crop.

The W. J. Jennison Co. has completed a 50,000-bushel elevator in connection with its mill at Appleton, Minn.

James Barker has the work of erecting his new elevator at Green Valley, Ill., well along toward completion.

The Sheridan Milling & Elevator Co., Sheridan, Wyo., has placed a Dickey Overblast Separator in its elevator.

The C. B. Rogers Co. of Jacksonville, Fla., contemplate fitting up an old hotel building for use as an elevator.

Benson Bros. have their elevator at Mahomet, Ill., completed. The machinery is operated by a gasoline engine.

Frank L. Warren has purchased his partner's interest in the grain firm of Stetson & Warren at East Sumner, Me.

The Walsh-De Roo Milling Co. of Holland, Mich., will build an elevator at Allegan and handle grain and produce.

Improvements on Peter Jorstad's elevator at Baldwin, Wis., were completed recently by the Barnett & Record Co.

The new elevator of Morton & Davis at College Corner, Ind., was opened recently in charge of Mr. Noke Morton.

The Schwedler Grain Co., Superior, Wis., has been incorporated by M. B. Coburn, E. Schwedler and Harrie Rogers.

Among the first buildings planned for the new town of Wishek, N. Dak., on the Soo Road, is a grain elevator.

Caughy & Carran, the Detroit, Mich., grain merchants, are building a 7-story elevator 108x68 feet, to cost \$18,000.

J. F. Wieser & Co. of Hico, Texas, are building a 50,000-bushel elevator and a 20-car warehouse at their flour mill.

Mammen & Funk are building an addition to their elevator at Tampico, Ill., for storing oats. It will be 32x40x22 feet.

The West Elevator at El Paso, Ill., has had a tower placed on its roof to accommodate the elevating machinery.

Frank Schumacher is building a 12,000-bushel elevator in connection with his grain warehouse at Ft. Washington, Wis.

Waller & Co. have let a contract for the erection of a 50,000-bushel elevator on the L. & N. Railroad at Henderson, Ky.

F. L. Smith of Van Buren, Ohio, has purchased and taken possession of the Z. H. Miller Elevator at Sherwood, Ohio.

Smith's Elevator at South English, Iowa, is being enlarged by a 16x18 addition, and the old part raised about 6 feet.

Geo. Jacobson and Lew Hicks are building a 20,000-bushel elevator at Hickson, N. Dak., making the third one there.

Robertson & Champlin have purchased M. Beckley's elevator at Phillipsburg, Kans., and have made some improvements.

Buell & Morse of Livermore and Geo. Schreiber of Humboldt have purchased the Halsey Elevator at West Bend, Iowa.

George Pearce has purchased the milling business of A. L. Baker at Fisher, Ill., and will conduct the same in connection with his grain and coal business.

The Winona & Dakota Grain Co. and the Winona Milling Co. of Winona, Minn., were last month consolidated under the name of the Atlas Elevator Co. with headquarters at Minneapolis, the stock hav-

ing been transferred to Chas. M. Harrington. A branch office will be retained at Winona.

The old established grain, hay, and grocery firm of D. H. Leach & Co. at Providence, R. I., made an assignment recently.

The McFarlin Grain Co. of Des Moines, Iowa, contemplates improvements in its elevator plant at Rockwell City, Iowa.

The Crescent Grain Co. expects to have its 40,000-bushel elevator at Anchor, Ill., completed about the middle of this month.

F. A. Scott has made extensive changes in his elevator at Eagle Grove, Iowa, so that he now has a nicely equipped plant.

G. M. Snyder succeeds T. W. Smith and the latter succeeds W. H. Ferguson in the grain business at McCool Junction, Nebr.

J. P. Woolford has purchased Erven Brothers' interest in the elevator at Galton, Ill., and will conduct the business alone.

A. D. Butts has just completed an elevator at Blackwell, Okla., 24x24 feet and 24 feet high, fitted with modern machinery.

J. M. Hartin will have an elevator ready for the new wheat crop at Lakota, N. Dak. It replaces the house burned last winter.

J. W. McManus is now proprietor of the grain business at Waxahachie, Texas, formerly owned by Wm. McManus & Co.

John Kyle and Jay Thompson have a new elevator in course of construction on the Winona & Western at Dover, Minn.

Hodges & Hyde are building an elevator at Sioux Falls, S. Dak., making four elevators besides three warehouses in that town.

R. H. & C. H. Crowder have succeeded A. W. Springer & Sons in the grain and general store business at New Lebanon, Ind.

The Lewiston Grain Co. has built an elevator at Lewiston, Ohio, and equipped it with Philip Smith's latest improved machinery.

Aaron Kuhn, the grain dealer and general merchant of Colfax, Wash., has purchased the Chambers-Price line of elevators.

The W. H. Howard Commission Co., Chicago, Ill., have equipped their horse at Sterling, Ill., with a Dickey Overblast Separator.

J. J. Daley of Wapella, Ill., is building an elevator near his old one, to be 20x40 feet, and 30 feet high, arranged for corn and oats.

Joseph Tarault's new elevator at Worstville, Ohio, is completed. It is fitted throughout with Philip Smith's improved machinery.

F. M. Campbell, Randolph, Ia., has ordered machinery for refurnishing his elevator from the Webster Manufacturing Company.

The A. P. Dickey Mfg. Co. of Racine, Wis., have placed their Overblast Separators in the elevators at Claremore and Miami, I. T.

H. H. Troth succeeds the Kellogg Grain Co. at McCook and Stratton, Nebr., the Kellogg Grain Co. going to Cedar Bluffs, Kans.

J. M. Thompson, Garrison, Iowa, has lately put in a large sized grain cleaner of the A. P. Dickey Mfg. Co.'s make—overblast pattern.

The Farmers' Elevator Co. of Wilmot, S. Dak., has bought the St. Anthony & Dakota Elevator Co.'s house at that place for \$3,250.

The plant of the La Rose Grain Co. at La Rose, Ill., is being improved. An engine will replace the horse power heretofore in use.

Metcalf & Cannon, Paullina, Ia., recently placed an order with the Webster Manufacturing Company for a complete elevator outfit.

The Farmers' Grain & Elevator Co. of Kingfisher, Okla., of which E. M. Flickinger is secretary, has its new elevator well under way.

O'Hara & Baldrige of Carlock, Ill., have put in a portable dump at their elevator there, and have also built a granary at Hudson.

G. A. Dudley has purchased an interest in the Johnson Elevator at Hubbard, Iowa, and the new firm of Dudley & Johnson have been making repairs.

W. H. Bacheller & Co., Limited, is a new incorporation at New Orleans, La., with a capital stock of \$100,000. It succeeds to the commission, mercantile and warehouse business of Bacheller, Baldwin & Co.

Boner & De Bolt's new elevator at Wolcott, Ind., was started up the latter part of last month. In the main building are 4 bins with an aggregate capacity of 25,000 bushels, while over the driveway are 4 more bins of about 15,000 bushels' capacity. In the

cupola is located the shelling and cleaning machinery. Power is secured by means of a 75-horse power boiler and engine.

Charles Cole and Irv. W. Smith have purchased Frank Smith's grain and coal business at Mason City and also at Cameron, Iowa.

It is expected that the Northwestern Elevator Company will rebuild their elevator that was burned last spring at Bathgate, N. Dak.

S. L. Jamison is building a 20,000-bushel grain warehouse at Tekoa, Wash., for storing and handling grain raised on his own land.

The Peterson Elevator at Grand Island, Nebr., has been purchased by S. N. Wolbach, and is being moved to another point in that city.

The Farmers' Seed Co. was recently incorporated to carry on a general seed business at Faribault, Minn. The capital stock is \$10,000.

City Mill Company, Sioux City, Ia., is using Webster Manufacturing Company machinery in making the improvements in its plant.

Hinton & Wheeler's elevator addition at Fisher, Ill., is nearing completion. A 10-horse power gasoline engine will replace the old one.

The Forrest Milling Co. of Cedar Falls, Iowa, has purchased the Strong Elevator at Waverly, where they will purchase oats for their mill.

Sharpie Bros. are remodeling a large barn at Milford, Ind., into an elevator, which, when completed, will be in charge of James Neff.

S. N. Norstrum has purchased an interest in Rolfe Bros' elevator at Fonda, Iowa, and the firm is now known as Rolfe Bros. & Norstrum.

G. J. Huhn of Shawano, Wis., has purchased the Miller grain warehouse at Clintonville and is remodeling it into a horse power elevator.

Enlargement being made in the storage room of the H. H. Clevidence Elevator at Mt. Morris, Ill., will give it a capacity of 60,000 bushels.

H. Lambert is building a new 50,000-bushel grain elevator at Beaverville, Ill. The Weller Mfg. Co. is supplying the grain handling machinery.

F. M. Fowler and C. E. Morlatt have purchased the old Junbo Rink at Camden, Ohio, and are converting it into a first-class warehouse.

R. E. Knowlton has severed his connection with the Monarch Elevator Co. at Jamestown, N. Dak., and gone into the life insurance business.

The Sleepy Eye Mill Co. of Sleepy Eye, Minn., will at once build a 15,000-bushel house at Lebanon, S. Dak., to take the place of one just burned.

The Sumner-Hudnut Co. of Pekin, Ill., contemplates the erection of an elevator at Chandlerville, where the company now has a grain dump.

The Belton Oil Co., Belton, Texas, has been incorporated with a capital stock of \$50,000 for the purpose of operating a cottonseed oil mill.

The Smith-Korner Co. at Superior, Wis., has been changed to the Smith-Alvord Co. The capital stock will be increased and the business extended.

A new 25,000-bushel grain elevator is being built at Woodland, Ill., by Cavitt Bros. The Weller Mfg. Co. was awarded contract for the machinery.

A new company at Minden, Nebr., by the name of the Wright Grain Co., will operate houses at Keene, Minden and Norman on the K. C. & O.

W. M. Newton & Co., Wm. McKee and Wm. Parmort are the projectors of a large elevator, having four dumps, to be built at once at Enid, Okla.

The Princeton Elevator Co. of Princeton, Ind., has awarded its contract to the Weller Mfg. Co. for the machinery for its new elevator at that place.

The Weller Mfg. Co. was awarded the contract for the complete machinery outfit for Riggs Bros' new grain elevator just completed at Kent, Iowa.

The Loup Valley Grain Co. at Ord, Nebr., a farmers' organization, has purchased the Perry Elevator and will handle grain on a large scale this year.

The Minneapolis & Northern Elevator at Ashby, Minn., has been improved by the erection of a brick power house and the installation of a gasoline engine.

The Great Western Distillery at Peoria, Ill., is being rebuilt. Its capacity will be 12,000 bushels daily, while the burned house had but 10,000 bushels' capacity.

Howard Haight & Co. are building an addition to their feed store at Millbrook, N. Y. An elevator will be conveniently placed for handling the grain from cars.

The Dodge Manufacturing Co. has just shipped 6 carloads of machinery to the Midland Elevator Co. at Midland, Ont. Among the machinery was one of the largest marine legs on the lake, having a

normal capacity of 20,000 bushels per hour. There were also two of the Dodge Manufacturing Co.'s Improved Trippers for 36-inch belt.

Kern & Schfield, Charles City, Iowa, have equipped their new horse at Staceyville, Iowa, with the A. P. Dickey Mfg. Co.'s Overblast Separator.

S. C. Bartlett & Co. of Peoria are building a new grain elevator in Monmouth, Ill. Oats bins with a capacity of 40,000 bushels are also being erected.

It is reported that Roseborough & Michaelson will erect a large elevator at Meadow Grove, Nebr., to take the place of their present warehouse system.

B. F. Slenker has leased his elevators at Panola, Ill., to the Middle Division Elevator Co. and will continue to have charge of them for that company.

The organization of a stock company at Grand Ledge, Mich., is talked of for the purpose of converting the old Monitor Mill into a grain elevator.

Jordan Bros. are building a new 50,000-bushel grain elevator at Decker, Ind. The Weller Mfg. Co. has the contract for the grain handling machinery.

A. G. Haynes & Co., grain dealers of Chandlerville, Ill., have purchased an 8-horse power Racine Gas Engine of The Racine Hardware Co. of Racine, Wis.

An additional elevator of 27,000 bushels' capacity is being added to the plant of the Alliance Milling Co. at Denton, Texas, giving it a total capacity of 177,000 bushels.

The W. W. Cargill & Co. recently placed an order with the Webster Manufacturing Company for new rope drives, elevators, etc., for their elevators at Green Bay, Wis.

Work of rebuilding the Brinson-Judd Elevator at Neodesha, Kans., which was burned nearly a year ago, is in progress. It will have a storage capacity of 30,000 bushels.

Albert Smith of Manassas and D. E. Newcomb of La Jara, Colo., are members of a committee that is looking after the organization of a farmers' elevator at the latter place.

N. R. Clift, of Zearing, Ia., is making some additions to his elevator, and has placed his order with the Webster Manufacturing Company for the necessary machinery.

Skadden & Ryno have completed a new 40,000-bushel grain elevator at Middleton, Ill. The contract for complete machinery outfit was supplied by the Weller Mfg. Co.

The recently organized Northwestern Elevator Co., Denver, Colo., of which F. F. Struby is manager, has commenced the erection of an elevator 50x126, 78 feet high.

The L. W. Peck Grain Co., Independence, Kans., have equipped their houses at Independence and Elk City, Kans., with Dickey Overblast and Elevator Grain Cleaners.

The Osakis Farmers' Elevator Co. at Osakis, Minn., has bought the M. & N. Warehouse and will enlarge and improve the structure. A gasoline engine will be installed.

Giles & Morse, who recently leased the Santa Fe Elevator at Solomon, Kans., have put it in first-class shape, and opened it for business under the charge of Mr. Morse.

Geo. S. Clayton of Denver, Colo., has purchased the elevator of W. W. Mitchell, Wood River, Nebr., also the Morris & Davis Elevator at Belgrade, Nebr., both on the U. P. R. R.

P. J. Kopriva of Faribault has purchased a half interest in G. H. Romweber's mill at Waterville, Minn. The new firm will build an elevator in connection with the plant.

J. W. Hupp & Co., McCook, Nebr., opened up the elevators at Palisade and Wanatah, on August 1, which have been closed for three or four years owing to the crop failures.

The W. W. Cargill Company's elevators at Green Bay, Wis., are closed and undergoing repairs. New cleaning machinery, a new boiler and a 400-horse power engine are being put in.

The El Reno Mill & Elevator Co., El Reno, Okla., recently put in a 200-horse power Hamilton-Corliss engine, and the elevator is kept running day and night handling the new wheat.

Frank B. Rice recently resigned his position as secretary and treasurer of the Bell Commission Co., Milwaukee, to become secretary of the Star & Crescent Milling Co. at Chicago.

S. G. & L. B. Chamberlain of East Liberty, Ohio, are erecting an elevator after plans furnished by Philip Smith of Sidney, Ohio, whose latest improved machinery will also be employed.

The Kansas City, Fort Scott & Memphis Railway has decided to remove its grain elevator from West Memphis, Ark., to its terminals in Rosedale, Kans. Work on the foundation for the elevator in Rose-

dale will be finished in a short time. The old elevator has a capacity of about 150,000 bushels, and the size will be increased whenever the business warrants.

The Smartville Grain & Cattle Co. has been incorporated at Smartville, Nebr., with a capital stock of \$2,500. The incorporators are Sam B. Parker, L. W. Lantz and Albert Hindera.

Armour & Co. are soon to commence building a 1,500,000-bushel elevator on the site of the house recently destroyed by fire, on the South Branch of the Chicago River at Chicago.

F. H. Hancock is building a 35,000-bushel elevator at Danbury, Iowa, which he expects to have completed by September 1. A 20-horse power gasoline engine will operate the machinery.

Sale & Ward, Dewey, Ill., have placed an order for another complete elevator outfit with the Webster Manufacturing Company. This house will be run by a Webster Gasoline Engine.

The Phoenix Mill Co. at Minneapolis, Minn., is increasing its grain storage capacity by an addition 12x50 feet and 53 feet high. It will be a frame structure covered with corrugated iron.

Woodworth & Co. of Minneapolis are building a 40,000-bushel elevator at Stillwater, Minn. John O'Brien is also building one of the same capacity. The Barnett & Record Co. has the contract.

John and Chas. Weimer have been succeeded in the grain business at Emden, Ill., by Bowles & Gemberling. John Weimer expects to build a new house there with a capacity of 2,000 bushels.

The Spencer Elevator Co. has lately improved its large plant at McGregor, Iowa, and put in 2 new boilers to increase the power. L. E. Davidson is superintendent for the company at this point.

C. A. Tower, who has been traveling in the grain business for the past fifteen years, has opened a grain commission office at Des Moines, Iowa. His Chicago connection is the firm of Lamson Bros.

C. C. Davis & Co. of Laura, Ill., have leased the Santa Fe Elevator at Princeville, making three houses now operated by them along the Santa Fe, namely, at Laura, Williamsfield and Princeville.

The Link-Belt Machinery Co. is furnishing the complete machinery equipment for the new Hoosac Elevator built by the Fitchburg Railroad at Boston, Mass. J. L. Record was the contractor and builder.

The Dakota Elevator Co. at Dakota, Ill., has been incorporated with a capital stock of \$2,500 by Peter Wolf, Geo. S. Smith and W. H. Wiler. The company will repair and improve the elevator at that point.

It is reported that the Big Four Railroad contemplates the erection of a transfer elevator at Kankakee, Ill., as by transferring grain at that point instead of Sheldon the work can be facilitated and cheapened.

At the last annual meeting of the Farmers' Elevator Co. of Garfield, Minn., Knute Opheim was elected president; Knute Nilson, secretary, and Norman Hanson, treasurer. A dividend of 50 per cent was declared.

More or less improvement preparatory to handling the new crop has been made in all the elevators at Wichita, Kans. J. G. Miller & Co. have enlarged and almost rebuilt their house and put in new cleaners and a new boiler.

The Board of Trade of Battle Creek, Mich., has given G. L. McLane & Co. of Union Mills, Ind., a bonus of \$1,000 to erect an elevator in Battle Creek with a capacity of 60,000 bushels. It will be located on the C. & G. T. Ry.

At Kalispell, Mont., an elevator will be built by T. C. Power, and another by the Missoula Mercantile Co. The Kalispell Industrial Co. is also erecting a flour mill and elevator. There will also be other buyers in that market.

At the annual meeting of the Cokato Elevator Co. at Cokato, Minn., last month, a dividend of 50 per cent was declared for the year. S. J. Swanson was elected president and treasurer, and G. P. Olson, secretary. This is the most successful farmers' organization in that state.

The Port Arthur Elevator at Port Arthur, Texas, will be ready to handle grain about September 1. The Dodge Manufacturing Co. of Mishawaka, Ind., furnished 10 carloads of machinery for this plant. The Barnett & Record Co. of Minneapolis and Chicago are the contractors and builders.

The Omaha Elevator Co. are building twelve new cribbed houses on the U. P. R. R. in Nebraska, varying in size from 20,000 to 40,000 bushels each; all to be fitted with gas engines, new offices, scales, etc., being as near complete for country work as they can be built. The location and capacity of some of them are as follows: Shelton, 40,000 bushels; Platte Center, 40,000 bushels; Stromsberg, 40,000 bushels; Warrenville, 20,000 bushels; Riverdale, 20,000 bush-

els; Glenwood Park, 20,000 bushels; Gothenburg, 20,000 bushels; Elm Creek, 20,000 bushels; Ord, 30,000 bushels.

The Exchange Grain Co. of Minneapolis has built a new elevator at Hutchinson, Minn., as an addition to the old Goodnow & Ives elevator. The combined capacity is 30,000 bushels, and they are operated by a gasoline engine. C. W. Treadway is buyer.

The Champaign Transfer Elevator Co. has sold its transfer house at Champaign, Ill., to the Middle Division Elevator Co. of Chicago. B. C. Beach has been placed in charge by the new proprietors and grain will be purchased as well as transferred.

The Shannon & Mott Co. has added to its milling plant at Des Moines, Iowa, a 50,000 bushel elevator. It is 34 feet square and 86 feet high. It has an 8-foot basement with 18-inch brick walls. The building is cribbed out of 2x6 plank laid flat, and the outside covered with iron siding.

The Baker-Jones Co. of Manhattan, Ill., having been dissatisfied for a long time past with the facilities afforded them by the Wabash Railroad, is contemplating the erection of a grain elevator at Brisbane, Ill., on the Elgin, Joliet & Eastern Railroad, which will give them the benefit of the South Chicago market, and also better rates to Eastern territory than they now enjoy.

Among recent shipments of Frontier Tandem Gasoline Engines by the Frontier Iron Works, Detroit, are: One 60-horse power, to Norway, Mich., for a village electric lighting plant of six hundred lights; one 40-horse power to Bay City, Mich.; one 40-horse power to Ogdensburg, N. Y.; one 40-horse power to Wichita Falls, and several 25 and 20 horse power engines of the same type.

A recent press report from Harmony, Minn., says: The A. & F. Michael Elevator Company, which has been in active operation from Preston to McGregor over fifteen years, has discharged all its hands and ceased to do business. Financial embarrassment, it is said, brought these conditions about. The E. L. Tollifson Elevator Company will take charge about the time this season's crop begins to move.

The Burlington & Mississippi Elevator at Burlington, Iowa, has been remodeled throughout, the elevator legs being placed 42-foot centers; new shovels, main drives, and a complete set of telescope trolley spouts were put in, making the working of the house entirely modern. All the machinery was supplied by the Dodge Manufacturing Co. James Stewart & Co. of St. Louis and Buffalo were the contractors.

The Consolidated Elevator Co. of St. Louis, Mo., received \$120,000 from the insurance adjusters for the loss of the Union Elevator at East St. Louis, Ill., in January last. The company has decided to expend something like this sum in a new house of 1,000,000 bushels' capacity, and last month awarded the contract to John S. Metcalf & Co. of Chicago. The new house will be of the usual crib construction, covered with sheet iron, and having facilities for unloading 100 cars per day and loading half that number. The old foundation will be utilized, and a loading house constructed on the levee for loading barges. This will be connected with the main house by a belt conveyor. It is expected to have the house completed about September 1.

James L. Record, who has the contract for building the new fireproof elevator at Charleston, Mass., for the Fitchburg Railroad, built for them a temporary elevator in 30 days. This elevator is connected with the belt conveyor system used in loading ships, and has a handling capacity of 100,000 bushels in 10 hours. The Dodge Manufacturing Co. of Mishawaka, Ind., supplied the belt conveyors, roller bearings and 9 of their Improved Belt Conveyor Trippers. Four of these trippers were fitted with split-discharge valves whereby part or all of the grain can be taken off at the tripper or resputted back on the belt and carried to another point. This improvement in discharge spouts greatly facilitates the loading of grain into vessels as it is not necessary to shut off the feed in order to move from one hatch to another, and time is saved in trimming the hatch.

The Commercial of Winnipeg, Manitoba, says: From all indications 1898 will be the banner elevator building year in the history of the Northwest. There is not an elevator company in the city that will not add to its storage facilities along every branch line in the province. Prominent among the new elevators will be those erected by the Northern Elevator Company. Already ten are under construction at the following points: Oak River, Varcoc, Pettypiece, Cypress River, La Salle, Starbuck, Elm Creek, Somerset, Swan Lake, and Union Point. Each of these will have a capacity of 30,000 bushels, and a few others will be erected later on in the season. When those mentioned are completed the Northern Elevator Co. will have 102 elevators in the province and territories. Breedy, Love & Tyron will spend about \$50,000 in erecting elevators at thirteen or fourteen provincial and territorial points.

WATERWAYS

Lake tonnage is not included in the charter tax of the war revenue law.

Toledo grain charters were made to Buffalo at 1c, while the Chicago rate was only $\frac{1}{2}$ c.

Reports to the Canadian parliament estimate the cost of a ship canal from Georgian Bay to Ottawa River at \$17,000,000.

One day this month charters for 1,000,000 bushels of grain were made, Chicago to Lake Erie at 1c, being the largest day's business for a long time.

The Erie Canal grain trade has had another backset which canal men are unable to understand. On August 7 there were over a hundred boats tied up at Buffalo waiting for cargoes and none offering.

It is rumored from Washington that the president has decided to recommend to Congress the desirability of immediate legislation in aid of the Nicaragua canal, which shall be completed by the United States.

Tacoma's harbor record for July shows 45 deep sea arrivals and 41 departures; imports, \$688,566; exports—wheat, 204,036 bushels; flour, 38,629 barrels; grain exports, same month, 1898, over same time in 1897, \$4,936,353.79.

Oswego (N. Y.) has started a movement to secure an abrogation of tolls on the Welland Canal, the agreement to this effect to be made through the commission now considering existing differences between the United States and Canada.

Although vesselmen have complained of dull business the coal and grain lake tonnage has been larger than a year ago, the grain receipts at Buffalo to August 1 being 17,000,000 bushels larger than last year for same period.

Although lake freights have stiffened a little during the past fifteen days, the rates this season have been the lowest on record. Three-quarters cent on corn, Chicago to Buffalo, and 1 $\frac{1}{2}$ ¢ to Lake Ontario, and the Ft. William-Prescott wheat rate 2 $\frac{1}{2}$ ¢ cents.

It is pointed out that within two years at the farthest, the canals of the St. Lawrence will be enlarged so as to enable them to pass vessels 255 feet long, 45 feet wide and 14 feet deep. This is the limit of the enlarged Welland Canal. At present the canals of the St. Lawrence will pass vessels that do not exceed 185 feet in length, 38 feet in width and 9 feet in depth.

The third annual convention of the Ohio Valley Improvement Association will be held at Wheeling, W. Va., September 14 and 15. The association up to this time has secured an appropriation to continue the work on the locks and dams of the Ohio River and, in connection therewith, the freeing of the Monongahela River from the private ownership of the system of locks and dams.

The portion south of the center line of the proposed 1,000-foot channel through and past Vidal Shoal, St. Mary's River, was opened to navigation late in June. The present channel has 300 feet width and 20 feet available depth of water. Toward the close of the season the portion north of the center line will be opened, with a width of 500 feet and a depth of 21 feet, when the southern portion will be closed and finally completed, giving a channel 1,000 feet wide with a depth of 21 feet.

The general government's surveying parties making the preliminary surveys of a ship canal between the lakes and Hudson River are now at work, two in the Mohawk Valley; one on the route between Troy and Lake Champlain; one on the Hudson from Troy to deepwater; one at the head of Niagara River to test the bottom of that river to determine the practicability of building a dam there to regulate the lake level; and finally one on the route from the foot of Lake Champlain to Lake St. Francis in St. Lawrence River.

The surface level of Lake Superior at Duluth is a foot lower than at this date a year ago. This low water is a disadvantage to the big boats and helps the smaller ones, which are really out of the competition during high water. The two classes of boats are now about on an equality. An old vesselman says there is no way of explaining positively the variations in lake levels, but he believes that they are lowering, though almost imperceptibly. This record is corroborated by Mr. G. K. Gilbert in the forthcoming survey of the U. S. Geological Survey.

The suspension of work on the Erie Canal, on which \$9,000,000 has been spent and the work left in such shape that from \$13,000,000 to \$15,000,000 will be required to finish it, has seriously impaired its efficiency for this season. Up to July 15, owing to delays, etc., only 5,453,000 bushels of grain were carried against 7,238,000 for same period last year. Since July 15 business on the canal has been very dull. All the canal business was in corn and oats, only 16,000 bushels of wheat going to tidewater

by the water route, while the railways have carried nearly 17,000,000 bushels this season.

Nearly 20,000,000 tons of freight passed into and out of Lake Superior last year, being an increase of tonnage of 25 per cent. Of this freight only 1-38 was carried in Canadian vessels. The cost of lake freight has been reduced to about 1 cent per ton per twelve miles.

The Russian law abolishing customs duties on vessels built abroad and registered in Russian ports has stimulated shipping ventures, the finance minister having received no less than eleven applications for authority to organize steam navigation companies. Some of these are for trading in the far East, but Odessa and other European-Russian ports are represented among the applicants.

Buffalo, as the gateway of the grain movement from the Northwest, is no longer without rivals. The Canadian routes are numerous, and during thus far this season have not been without their share of patronage. From Duluth and Chicago the Chicago, Duluth and Parry Sound line of boats are carrying corn and wheat to the elevator at Parry Sound. The upper lake boats running in connection with the Grand Trunk Railway carry wheat and corn to the elevator at Midland. By the Canadian Pacific Railway Co.'s vessels grain is carried to Owen Sound. Other lake carriers, as the Georgian Bay and Lake Superior Steamboat Line, bring down wheat and corn from the Western ports to the various terminal elevators on Georgian Bay and Lake Huron. But the three Georgian Bay ports—Midland, Parry Sound and Owen Sound—are the main gateways. From the first the Grand Trunk Railway, from the second the Ottawa, Arnprior and Parry Sound Railway, and from the third the Canadian Pacific Railway, carry the grain onward across Ontario to tidewater and the ocean steamers at Montreal, where, within a month after the opening of navigation this year, 8,000,000 bushels of grain had been loaded at her wharves.

OBITUARY

F. F. McCardle, of the grain firm of McCardle & Pennington, San Antonio, Texas, died July 29, aged 48 years.

Meredith H. Thomas, for 33 years a banker and grain merchant at Galveston, Ind., died July 25, at the age of 71 years.

Peter Voorhees died at White House, Hunterdon Co., N. J., on July 26. He had been a large dealer in stock and grain.

The death of R. P. Fisk Jr., son of the well-known oats shipper, was announced on the Chicago Board of Trade on July 26.

N. B. Davidson died at his home in Butte, Mont., July 11, at the age of 53. He was a native of Union County, Ky., and had been engaged in the grain business in Butte since 1890.

Walter B. McAtee, one of the oldest members of the Baltimore Chamber of Commerce, died in London, August 4. For several years he was a member of the grain firm of Levering & McAtee.

Hiram O. Alden, for the past 20 years a resident of Pueblo, Colo., died there on July 6, of heart trouble. For a number of years he was in the wholesale grain business. He was 64 years of age and a native of Bangor, Me.

Will McMichael, junior member of Thomas McMichael & Son, grain dealers operating a line of elevators through Minnesota and Iowa, with headquarters at La Crosse, Wis., suicided at McGregor, Iowa, on August 4, by shooting. He was 33 years old, and unmarried. Business reverses are supposed to have been the cause.

Albert E. Neely died at his home in Chicago on August 7, aged 63. He was a charter member of the Chicago Board of Trade, and held his membership until the time of his death. For many years Mr. Neely was part owner of the Neely & Hambleton Elevator. He had long been prominent in Episcopal Church work in Chicago.

Wm. D. Houghteling, a pioneer of Chicago, died August 8 at his home in Asheville, N. C., aged 79 years. For many years prior to the civil war, deceased was a member of the firm of Houghteling & Shepard, and did a large commission business in grain. He also served as vice-president of the Chicago Board of Trade. During later years he was extensively engaged in the lumber business.

No oats were inspected at Tacoma the last crop year owing to a court decision which held the grain inspector has no right to inspect feed oats. The inspector thereupon determined that he would not waste time ascertaining whether the consignment was feed or milling oats and dropped oat inspection at the beginning of the year.

CROP REPORTS

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

WISCONSIN, Grantsburg, Burnett Co., Aug. 4.—Wheat will all be cut this week. The quality is good and the yield will be an average. Oats are all cut, the quality is below the average and the yield is light. Rye is all stacked. It is of extra good quality and good yield. Corn promises a good crop, but needs moisture. C. A. GREENE.

ILLINOIS CROP REPORT, Aug. 5.—Corn generally has received much benefit from the rains and is doing well. A good crop is now assured in the southern districts, in northeast counties and along the north tier, but much permanent injury has resulted from the dryness and chinch bugs in central counties and there the crop will be short. Wheat, rye and oats thrashing continues. Stubble plowing made good progress, the soil working well. Pastures, second crop clover, millet, buckwheat, and broomcorn were much benefited by the rains.

WASHINGTON, Aug. 1.—The largest harvest ever known in the state is in prospect. In the Palouse and Walla Walla sections the wheat crop will exceed 18,000,000 bushels, while over 25,000,000 bushels are estimated for the state. There has been an increase of from 5 to 8 per cent in the acreage of wheat sown this season over last year. The barley and oats crop promise equally well, but there will be no increase in these over the output of last season. There has been a slight decrease in the acreage, owing to the high prices and brisk demand for wheat.

NEW MEXICO CROP REPORT, Aug. 1.—Many farmers of central and southern sections have their wheat and second crop of alfalfa all secured. Wheat promises a good yield, and as a rule the second crop of alfalfa turned out much better than the first. Owing to the frequent rains in some northern localities not all of the first alfalfa crop has been secured, although the second crop is ready for cutting. Corn continued to make splendid growth; judging from the color and stand the crop is unusually promising. Oats are ripening fast and a large yield is expected.

MISSOURI CROP REPORT, Aug. 6.—Needed rains in many localities have made conditions so favorable that a large improvement is expected during August. Wheat is estimated at ten bushels per acre; it suffered but little damage in the shock except in the case of a few fields washed away by overflows, but the berry over a large acreage is small and inferior in quality. With favorable conditions an increased acreage will probably be seeded in the fall. Oats were materially injured by rust just before harvesting, and the yield was far below what was expected. Rye yielded twelve bushels per acre, and is only fair quality.

IOWA CROP REPORT, Aug. 9.—According to the Weather Crop Bulletin of the Iowa weather and crop service, the drouth was broken during the week ending August 9, bringing great benefit to corn and other late maturing crops. Thrashing and stacking operations were delayed, and grain in shock has been in danger of damage by wet weather. The reports generally have a more cheerful tone in relation to the corn crop, which with favorable conditions in the future now gives promise of a full average output for the state at large. Thrashing returns, so far as received, indicate above an average yield of wheat, rye and barley. Oats variable, but likely to make an average. The August 1 reports of county and township crop correspondents show the following averages for the state of the unharvested crops: Corn, 94 per cent; millet, 90; flax, 95; broom corn, 90. These estimates were made by correspondents a day or two previous to August 1, and before the drouth was effectually broken. The condition of corn has been materially advanced since that date, and probably brought very near to the normal for this time of the year.

KENTUCKY CROP REPORT, Aug. 1.—The month of July has been favorable for wheat thrashing, with the exception of the last week of the month, when frequent showers put a stop to it. Some farmers are holding their crop in stack, preferring to keep it in that form. The question "has yield equaled expectations," resulted in 76 replies in the affirmative and 67 answers in the negative. In 1897 the same question elicited 100 answers in the affirmative and 11 in the negative. To the question on quality 64 correspondents set it down as "good," 59 as "average" and 18 report it "bad." In 1897 110 correspondents reported quality "good," 5 an "average" and no reports of bad quality were received. On the subject of free marketing of the crop 18 correspondents say it is being sold as thrashed and 124 say it is being held for higher prices. The corn crop as a whole presents a very satisfactory condition. Some counties have suffered from drouth, while a few have had an excess of moisture. One section, composed of Todd, Web-

ster and Crittenden counties, report some damage from chinch bugs. The condition for the state averages 97, which is an improvement of one point during July. On Aug. 1, 1897, the condition was 93, and on same date of 1896 the condition was 85.

WISCONSIN CROP REPORT, Aug. 5.—The week has been very favorable for the completion of haying and harvesting. The hay crop was generally exceptionally heavy and has been put up in good condition. In the central and southern counties grain is nearly all in the shock and some thrashing has been done. The yield of rye and oats is rather disappointing, the dry weather during the past few weeks having injured these crops in many localities. Barley is generally turning out well and the quality is said to be good. Corn is earing out well, except in some of the western and northwestern counties where there has been lack of sufficient rainfall.

OHIO CROP REPORT, Aug. 1.—The official report of the Ohio Department of Agriculture on the condition of crops, Aug. 1, 1898, is as follows: The following report is based upon returns received from the regular township crop correspondents of the Department, and represents the average percentage condition of the crops named August 1: Wheat—Condition compared with an average, 83 per cent; harvest began June 28. Oats—Condition compared with an average, 83 per cent; harvest began July 17. Barley—Harvest began July 1. Rye—Harvest began July 1. Clover—Area sown in 1897 cut for hay, 60 per cent; hay, product per acre, 1.45 tons; hay, quality compared with an average, 94 per cent. Timothy—Condition compared with an average, 92 per cent. The wheat harvest was finished early and a great deal of thrashing has been done, the result of which proves that the wheat product will not reach the amount that was anticipated a month ago. The reports of wheat not thrashing out as well as expected are quite general all over the state, and the average condition or prospect for the state as deduced from the returns is 3 per cent less than the estimate made July 1. Heavy rains occurred in some sections while the wheat cut was still in the field, causing some damage, especially in the south central portion of the state, where the rains were continuous for many days. Corn is not very uniform, but during July it made rapid growth and there is a good prospect if August is favorable. Some of the corn is badly blown down by the high winds that in some sections accompanied the recent rains. Oats are very short and some damage has occurred in the shock.

KANSAS CROP REPORT, Aug. 5.—According to the report of the State Board of Agriculture, the crop of winter wheat aggregates 60,570,656 bushels, being with one exception (1892) the largest ever grown in the state. The yield per acre is figured on the entire acreage sown and is 13.51 bushels. The aggregate acreage sown was 4,481,637, or 35 per cent greater than in the preceding year, and the product greater by 10,530,282 bushels. Wet weather, extreme heat resulting in rust and falling down when the heads were filling, cut the yield much below what had promised almost a certainty, while the quality of much of the grain that ripened was seriously injured; hence a consensus of the carefully analyzed reports indicates that probably 8 per cent of that total, or about 5,394,894 bushels, is unmerchantable for flouring purposes; 36.33 per cent or 22,009,187 bushels, can be rated as "medium," and 54.75 per cent, or 33,166,575 bushels, as "good." Thus, taking no account of that reported as unsuitable for flour the state appears to have in sight 5,135,388 bushels more of milling winter wheat than was raised in 1897. About 33 per cent is reported as likely to be marketed by October 1, and the acreage that will be sown the present fall as slightly larger than last year's sowing. Spring Wheat—The yield of spring wheat is 1,380,291 bushels, or 11½ bushels per acre on 117,485 acres. This is about 40 per cent more of this grain than was grown last year on a considerably larger acreage. Rye—Acreage, 153,600; yield, 2,397,841 bushels; yield per acre, 15.6 bushels. Oats—The yield of oats is 18.75 bushels per acre on 1,055,645 acres, or 19,832,731 bushels. The acreage was larger than last year, but the total yield less by 15 per cent. Very little good oats is reported. Corn.—The season throughout has been in most of the state adverse to corn. Weather too cool and too entirely wet, interfered with planting, germination, and cultivation up to the beginning of July, and since then the opposite conditions have prevailed to such an extent that the poor stand, late planting, rank growth of weeds and too dry, baked condition of the soil could not be overcome. Of course there are local exceptions and favorable situations giving ample promise, but the average condition for the whole state is 57, against 79 May 31. In 40 corn counties it is higher, reaching 105 in Chautauqua and 100 in Linn and Rawlins. It is 95 in Woodson, 94 in Cherokee and 80 or above in Coffey, Cowley, Logan, Norton, Pratt and Sheridan. In 39 counties the condition ranges at 70 or above. The worst showing applies largely in some of the very foremost corn-producing counties, where it is, for example, in Clay 28, Cloud 33, Ellsworth 25, Jewell 33, Mitchell 35, Osborne 25, Ottawa 26, Republic 30,

Rooks 25, and Smith 43. The area planted was 7,242,437 acres, or nearly 13 per cent, or 1,051,000 acres less than in 1897. Barley—Acreage, 122,458; average yield per acre, 23.25 bushels; total yield, 2,848,144 bushels, or 65 per cent more than last year. Flax—The area in flax was 50,000 acres or about 30 per cent greater than last year and the increase in output 36 per cent. Total acres, 219,393; total crop, 1,638,415 bushels; yield per acre, 7.46 bushels. Other Crops—The condition of other crops is as follows: Broom corn, 74; castor beans, 75; clover, 85; timothy, 80; alfalfa, 86; pastures, 90; Irish potatoes, 75; sweet potatoes, 80; millet, 78; Kaffir corn 83.

GOVERNMENT CROP REPORT, August 10.—According to the report of the United States Department of Agriculture, Washington, D. C., the following average conditions prevailed on August 1: Corn, 87; spring rye, 93.7; barley, 79.3; spring wheat, 96.5; oats, 84.2; buckwheat, 87.2. The condition of corn, 87, is 3.5 points lower than last month, 2.8 points higher than on Aug. 1, 1897, but 9 points lower than on Aug. 1, 1896, and six-tenths of one point below the August average for the last ten years. The principal state averages are as follows: Ohio, 89; Indiana, 86; Illinois, 72; Iowa, 92; Missouri, 86; Kansas, 69, and Nebraska, 85. The condition of spring wheat, 96.5, is 1.5 points higher than last month, 9.8 points above the average on Aug. 1, 1897, 17.6 points above that for Aug. 1, 1896, and 13.5 points above the August average for the last ten years. The conditions in the principal states are as follows: Minnesota, 101; North Dakota, 95; South Dakota, 82; Nebraska, 97, and Iowa, 94. The average condition of spring rye is 93.7, which is 3.2 points lower than last month, but 3.9 points higher than on Aug. 1, 1897, 5.7 points higher than on Aug. 1, 1896, and 6.4 points above the August average for the last ten years. The average condition of oats is 84.2, as compared with 92.8 on July 1, 86 on Aug. 1, 1897, 77.3 on Aug. 1, 1896, and 83.7, the August average for the last ten years. The proportion of the oat crop of last year still in the hands of farmers is estimated at 6.4 per cent, as compared with 10.1 per cent of the crop of 1896 in farmers' hands one year ago. The average condition of barley is 79.3, as compared with 85.7 on July 1, with 87.5 on Aug. 1, 1897, with 82.9 on Aug. 1, 1896, and 86, the August average for the last ten years. Preliminary returns indicate a reduction of 5.5 per cent in the acreage in buckwheat as compared with last year. The condition of buckwheat is 87.2, against 94.9 on Aug. 1, 1897, 96 on Aug. 1, 1896, and 90.2, the August average for the last ten years. The condition of timothy hay, 99.3, is almost unprecedentedly high.

MICHIGAN CROP REPORT, Aug. 6.—The average yield of wheat per acre, as estimated by correspondents this month, is for the state 17.96 bushels; southern counties, 18.16 bushels; central counties, 17.93 bushels, and northern counties, 15.57 bushels. Compared with July 1 there is an increase of 1.22 bushels in the state, of 1.59 bushels in the southern counties, and of 0.55 bushel in the central counties, and a decrease of about one-half bushel in the northern counties. The figures point to a crop of about 30,700,000 bushels. This is more than ever returned in the Farm Statistics except in 1879, when the total yield was 30,983,340 bushels, and in 1882, when it was 32,568,688 bushels. The acreage in 1882 was 1,688,269 acres, and average per acre 19.29 bushels. The highest average yield per acre for the entire state of which we have record is 19.91 bushels in 1885. That year it was 20.28 bushels in the southern counties. The largest acreage ever reported was in 1880, 1,768,475 acres. The crop has been secured in fine condition and is of excellent quality. In answer to question as to quality 590 correspondents answer good, 91 average, and 5 bad. The number of bushels of wheat reported marketed in July is 542,264, as compared with 665,294 reported marketed in July, 1897, and the amount marketed in the twelve months, August-July, is 17,164,925 bushels, as compared with 10,130,876 bushels in the same months last year. The average condition of corn in the state is 82, southern counties 85, central 83, and northern 66. The condition in the southern counties is substantially the same as one year ago, but in the central and northern counties it is lower, making the average for the state five points lower. Oats are estimated to yield 29 bushels per acre, or about two bushels less than a full average for this state. A number of correspondents report oats light in weight on account of dry weather at the time the crop was maturing. The hay crop is estimated at about nine-tenths of an average for the state. The percentage is only 84 in the southern counties. The average condition of meadows and pastures is 75. Clover sowed this year is 64 for the state, and only 56 for the southern counties. These figures indicate that the seeding is largely lost.

Germany is credited with having produced another India-rubber substitute. The process consists in the oxidation of linseed oil containing jute refuse properly prepared.

BARLEY AND MALT

The Juengling Brewing Co. has succeeded J. R. Myers, brewer, at Trail, B. C.

The Columbia Malting Company of Chicago is building a malt house at Hammond, Ind.

The American Malting Company has decided to increase production this season by 1,000,000 bushels.

The Washington barley crop this year has been a good one. New grain is held by farmers at 75 cents to 85 cents per bushel.

The malt house of the Scott Malting Co. of Lyons, N. Y., was sold by order of court June 30, to satisfy a judgment of \$50,000, to the Robert Gere Bank of Syracuse, N. Y.

The first formal convention of the new United States' Maltsters' Association will be held the first Tuesday in September. The membership is increasing quite rapidly.

The government crop report of August 10 puts the average condition of barley at 79.3, compared with 85.7 on July 1, and with 87.5 July 1, 1897, and 86 as the average of the past ten years.

Harry Rubens announces from New York City that he has secured the necessary capital to syndicate a number of the brewing companies of Chicago not now included in the English syndicates.

The large malting plant of the David Stevenson Company, Oswego, N. Y., was struck by lightning July 19 and burned, with over 200,000 bushels of malt. The loss is placed at \$150,000. The plant will probably not be rebuilt.

The American Malting Company is building a new steel elevator of 500,000 bushels' capacity in connection with its plant at Milwaukee. The Weller Mfg. Co. of Chicago have the contract for the machinery outfit complete.

The improvements to the malt house of the L. Rosenheimer Malt and Grain Company of Kewaskum, Wis., consist of an addition of 12 pneumatic drums, a new kiln, and three steel storage tanks, with a total capacity of 100,000 bushels.

Wm. McMichael of the firm of T. McMichael & Son of McGregor, Iowa, well known in the barley trade, committed suicide at his Iowa home August 3. There has been no explanation. Mr. Wm. McMichael represented the firm in Chicago.

Chicago receipts of new barley have been light, but some lots have been of exceptionally choice quality, picked up rapidly for storing at 34@40 cents. The outlook is favorable; stocks of old barley are smaller in the visible supply than for some years.

Walter Bros. of the Walter Bros. Brewing Company of Menasha, Wis., have bought the plant of the Bohemian Brewing Co. of Pueblo, Colo. The brewery has been making about 1,000 barrels annually; but the new owners will remodel the premises and may build a malt house.

The German barley crop prospects, especially in the choicest districts of Bohemia, Bavaria, and the Saale, are highly satisfactory so far. Hungary's yield, now harvested, is estimated at 35 per cent increase over last year's crop. The quality of the later harvestings is not yet assured.

The annual meeting of the Ontario Brewers' and Maltsters' Association was held at Toronto, Ont., June 28. The officers of last year were reelected as follows: President, Geo. Sleeman; first vice-president, Robert Davies; second vice-president, John Labatt; secretary and treasurer, E. A. Reeve.

A Milwaukee barley house made inquiries July 20 as to barley of its correspondents, learning that in Wisconsin there will be a smaller production, but a better quality than last year; Minnesota an average crop of excellent quality; Iowa a larger production of much better quality, a large proportion being good malting; Nebraska, an average production of excellent quality; South Dakota, large production of average quality.

D. H. Stuhr Grain Co. of Davenport, Iowa, in their barley report for 1898, dated July 25, estimate the yield of Western spring barley (all barley raised east of the Missouri River, including Nebraska) at 38,347,400 bushels, or 4,272,000 less than last year; and that of Pacific Coast barley (all grown west of Missouri River) at 8,039,000 bushels, or a decrease of 16,027,000 bushels, or 67 per cent. The decrease for 1898 in the Pacific class is due to the almost complete failure of the California crop. The total yield for the year is estimated, therefore, at only 46,386,181 bushels, against 66,685,127 bushels in 1897. They add: "The stock of malt on hand with brewers and maltsters has not for a great

many years been so closely run down as this season, due mainly to the fact that the 1897 crop was so poor, and the trade only laid in enough stock to carry them through, and took the chances for better quality in 1898." So far their samples show on the average a vast improvement over last year's crop in quality.

Recently published statistics state that the acreage devoted to barley in England in 1897 was reduced by 69,000 acres; in Scotland an increase of 15,000 acres in barley-grown was recorded. The total production for the year was 55,158,713 bushels for England, 3,116,438 bushels for Wales, and 8,538,915 bushels for Scotland. The average yield was from 32 to upward of 33½ bushels per acre. The total receipts of foreign barley in the United Kingdom for the year in question amounted to 18,958,720 hundredweight, valued at about \$23,000,000.

TO DESTROY THE BARLEY WEEVIL.

The Country Brewers' Gazette, London, says the following mixture will be found very efficacious for destroying and ridding warehouses and malt houses of the barley weevil pest. It should be carefully put into all openings in beams, rafters and walls; and to be lasting in its effects should be applied boiling hot. Use one bushel lime, one bottle best carbolic acid, three pounds Russian tallow. As the weevil increase very rapidly, and are virtually great-grandfathers in a few hours, the reader will see the absolute necessity of prompt action as soon as they see a solitary specimen on their premises.

EARLY SHIPPING OF BARLEY.

A barley buyer at Davenport, Iowa, advises his farmer friends to hold their barley for a longer time before marketing than they usually do. Marketed, as much barley is, as soon after harvesting as possible, the grain is only partially cured, and pretty sure to give the elevator man handling it trouble and expense enough, to prevent its heating and molding during the sweating process, to more than make up for any benefit he may gain by purchasing uncured grain. Maltsters, as a rule, do not begin their season before September. If the barley were held by the farmer until that time, and thus given a chance to cure properly, it would probably sell at a better profit to the farmer because it would grade higher for malting purposes.

RECENT MALTING PATENTS.

Geo. J. Meyer of Buffalo, N. Y., has been granted a patent (No. 608,338) for pneumatic malting apparatus. The peculiar feature of the system is the construction of the drum, which may be briefly described as a perforated rotating shell, containing a perforated ventilating tube having at one end an inclined extension, the center line of said tube being parallel with but not coinciding with the axial line of the outer shell, or drum for agitating the growing grain.

Mr. C. N. H. E. Webb of Tytherley, Wimborne, England, has invented a malt shovel, the blade of which is formed of sheet aluminum or of an alloy of that metal. The sides and working edge are strengthened by wire and a strip of steel. The advantage claimed for this shovel is its extreme lightness.

Mr. Alex. Fraser, an English brewer, has patented the use of oat malt as a substitute for barley malt in the brewing of pale ale. The proportions recommended are 6,048 pounds of oat malt and 224 pounds of sugar, or 4,536 pounds of oat malt, 1,512 pounds of barley malt, and 1,224 pounds of sugar for 55 to 60 barrels of pale ale. The oats in the process of mashing do not require to be steeped as long as the barley, about 45 hours being sufficient.

THE BARLEY TARIFF.

A Buffalo paper, on the authority of a prominent barley operator of that city, explains the decrease of barley acreage in New York state during recent years by claiming that the barley tax of 1891 overstimulated production in the Northwest, and drove the more costly New York barley out of production. It may be possible that the immediate effect of the McKinley bill may have been in this direction, since New York barley was highly esteemed by local maltsters to mix with Canadian for malting purposes; but the truth is that barley growing on the American continent has in the past ten years followed wheat upon the new lands of the West. Barley growing has, in fact, moved westward in Canada quite as rapidly as it has in the United States; and tariff or no tariff, it would have done so just the same. This westward movement began, in fact, in Canada some time before the tariff of 1891, the reduction of which by the Wilson bill had no effect on production or price. If the tariff had any effect on barley production or prices, it probably acted indirectly to stimulate (in 1892-93, when barley malt was exceptionally high) the use of corn substitutes for barley malt in the production of the light beers which have since come to be so popular—perhaps more popular, both with brewers and drinkers, than the strictly barley malt beers ever were.

COMMISSION

The grain commission firm of Conover, Gee & Co. at Minneapolis, Minn., has dissolved.

The Tormey Commission Co. at West Superior, Wis., has suspended owing to financial troubles.

W. E. Brigham was recently admitted as a member of the firm of Bowman & Co. at Toledo, Ohio.

The Woodson-Young Grain Co. is a recent incorporation at Kansas City, Mo., with a capital stock of \$7,500.

J. D. O'Brien has opened an office at Winnipeg, Man., and announced himself as a grain commission broker.

The S. S. Tod Co. of Louisville, Ky., has incorporated with a capital stock of \$5,000 to do a general feed and commission business.

At a recent meeting of the stockholders of the Nye & Jenks Grain Co. of Chicago, the capital stock was increased from \$60,000 to \$100,000.

James M. Hobby & Co. have been incorporated at Portland, Maine, with a capital paid in of \$125,000, to deal in stocks, bonds and grain.

The Milwaukee Elevator Co. of Chicago has been incorporated by Jacob R. Custer, Joseph A. Griffin and Timothy F. Mullens. The capital stock is \$50,000.

The International Grain Co. has been incorporated at Kansas City, Mo., with a capital stock of \$2,000. The incorporators are G. H. Davis, F. C. Davis and Issy Lande.

The McQueen Grain Co. has been incorporated at Grand Rapids, Mich., to deal in grain, hay, seeds, etc., on commission. The capital stock is \$5,000; one-half paid in.

At Minneapolis, Minn., the Sidle-Scott Co. has been incorporated with a capital stock of \$10,000, to carry on a general grain business. The incorporators are E. B. Barber, C. K. Sidle and A. M. Scott.

Wm. C. Bloomingdale, the hay and produce merchant, has removed his head office to 95 Broad Street, New York, from Commercial Wharf, Brooklyn. A branch office will be continued at the latter place under the management of Mr. Fredericks, as usual.

Gregory, Carter & Co. of Minneapolis, Minn., have incorporated with a capital stock of \$50,000 to engage in the grain and elevator business. The officers are W. D. Gregory, president; O. P. Carter, vice-president; C. E. Thayer, secretary, and J. H. Cook, treasurer. The above, with J. Jennison, constitute the board of directors.

S. W. Edwards & Son, commission merchants and feed dealers of Chicago, Ill., with elevator and warehouse at 110 to 120 N. Elizabeth Street, are contemplating adding to their already very complete facilities by putting in a new mill for grinding flaxseed. They have been having a good demand for flaxseed meal during the past few months, and with their new mill will be able to supply the trade to better advantage.

Ware & Leland, commission merchants of Chicago, Ill., have recently added additional rooms to their suite of offices in the Gaff building to accommodate their growing business. The company has representatives on all the principal exchanges of the country, and have just put in private wires to the principal cities. The New York office at 11 New Street is in charge of John Savoy. The firm now has eight representatives on the Chicago Board of Trade. A foreign department has been established, and this is in the hands of capable operators. The cash business is in charge of E. G. Heeman. Dwight O. Clapp is general manager of the office, while the traveling representatives are L. B. Wilson and C. K. Sackett.

OUR CALLERS

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

Robt. W. Jessup, Minneapolis, Minn.
J. S. Leas of Barnard & Leas, Moline, Ill.
Leo Peterson, Commercial Review, Portland, Ore.
J. F. Johnson of Johnson & Field Mfg. Co., Racine, Wis.

C. R. De La Matyr, of Seeley, Son & Co., Fremont, Neb.

C. N. Howes of Invincible Grain Cleaner Co., Silver Creek, N. Y.

A. F. Shuler, Minneapolis, Minn., representing Huntley Mfg. Co., Silver Creek, N. Y.

E. A. Ordway, Kansas City, Mo., representing Invincible Grain Cleaner Co., Silver Creek, N. Y.



T. J. Haybacker & Co. have commenced work on a large hay warehouse at Cadmus, Mich.

A fire on Bernard Meyer's stock farm near Somerville, N. J., on July 14, burned 200 tons of hay.

Breed & Co.'s hay and grain storehouse at Lynn, Mass., was destroyed by fire on July 19. Loss \$3,000.

O. J. Liggett's wholesale hay house at Steubenville, Ohio, was partially destroyed by fire August 3. Loss \$3,500, partly insured.

H. G. Evans of Louisville, Ky., was recently awarded a government contract for 1,000,000 pounds of straw at 35 cents per hundred.

During the first five months of 1897 the Argentine Republic exported 333,603 bales of hay, against 359,127 bales in the same period of 1897.

A large contract for hay was recently let by the quartermaster at Tampa, Fla., to G. W. Brooke of Atlanta, Ga., at 71½ cents per 100 pounds.

Harvey & Tregloan of Clyde Park, Mont., have put up about 1,000 tons of hay this season, consisting of alfalfa, timothy and small grains.

The Quartermaster's Department recently purchased of John Moonan, in the open market at New York, 756,000 pounds of hay at 75 cents per hundred.

On July 11 a fire destroyed Wm. B. Colyer's hay barn at Central Bridge, N. Y., containing 500 tons of straw. Insurance said to be \$1,000 less than value.

James T. Clendenin and Wm. Hopps have been elected to serve for 3 years as members of the hay and straw committee of the Baltimore Chamber of Commerce.

On July 18 a large hay barn on the farm of Edward Simms, near Little Falls, N. Y., was struck by lightning and destroyed by fire. It contained about 75 tons of new and 25 tons of old hay.

The hay and feed establishment of John J. Badenoch at 44 Desplaines Street, Chicago, had a narrow escape from destruction by fire recently. A load of hay standing at the rear door caught fire, but was soon extinguished, with a loss of \$25.

The St. Louis Hay & Grain Co. last month secured a government contract for 9,000,000 pounds of hay to be delivered at Chickamauga. This will require from 450 to 500 cars to transport it, and is said to be the largest single hay contract ever let by the government.

The Harrison Hay & Grain Co. of St. Louis made an assignment recently as a result of the slump in prices following the collapse of the Leiter deal. The firm was heavily loaded with cash oats. Mr. W. B. Harrison, president of the company, has many friends on the Exchange willing to aid him, and he will probably resume business in a short time.

The East St. Louis Hay Exchange at East St. Louis, Ill., was totally destroyed by fire on July 28, also 5 cars of baled hay standing on a sidetrack near by. The Exchange was the property of Forrester, Baxter & Co. The building cost \$4,600, and was insured for \$3,500. The contents were fully covered by insurance. The fire originated from a locomotive spark.

Two supposed incendiary fires occurred at Brockton, Mass., on July 20. The first destroyed the hay storage rooms and stable of C. H. Felker & Co. About 100 tons of hay and 6 horses were lost. The loss is partially covered by insurance. Before this fire was extinguished the hay and grain warehouse of Nye & Gleason was found to be on fire. Here 300 tons of hay and considerable grain and other stock were totally destroyed. Nye & Gleason also carried insurance covering the major portion of their loss.

The St. Louis system of handling hay will probably be introduced into the warehouses of Chicago, as the result of a visit made by a committee from the Hay Receivers' Association of Chicago, composed of Geo. S. Bridges and M. M. Freeman. The distinctive feature of the St. Louis plan is that the cars of hay are run into the warehouse and weighed, then unloaded and weighed again. The hay is piled according to grade. This is said to be much more economical and satisfactory than the

"track system" of handling in vogue in Chicago and other places.

During the 6 months ending June 30, 1898, there was received in New York harbor 188,516 tons of hay against 155,557 tons during the corresponding period of last year, and 152,893 tons in 1896. These figures are exclusive of all hay intended for export, and show a surprising increase of local consumption.

According to the Citrograph of Redlands, Cal., Jas. C. Cole cut and baled 44 tons of hay of extra good quality from a ranch of less than 10 acres. The land was thoroughly prepared and twice irrigated. The hay is said to be worth \$20 per ton there, thus making the crop worth about \$90 per acre. For a dry season this is considered remarkably good even in that productive region, and certainly savors of a larger percentage of profit than any dealer would dare dream of nowadays.

Reports as to the new crop of hay, from all over the United States and Canada, are nearly, if not quite, unanimously to the effect that it is one of the best crops ever harvested, both as to quantity and quality. As the crops in the importing countries are almost equally good, it is evident that very low prices will prevail. It is safe to say, however, that the relations between shipper and receiver, and buyers and sellers generally, will be much more satisfactory than they are during seasons when efforts are constantly being made to force poor grades onto the market.

The total receipts and shipments of baled hay at various markets during the first 6 months of 1898, compared with the same period of 1897, were as follows:

	Receipts.		Shipments.	
	1898.	1897.	1898.	1897.
Chicago, tons.	113,596	121,380	6,232	12,401
Cincinnati, tons. . . .	74,938	45,526	59,705	26,820
St. Louis, tons.	76,327	99,866	20,940	38,631
Indianapolis, tons. . .	2,010	4,620	40	110
Kansas City, tons. . .	42,010	47,640	12,400	26,920
San Francisco, tons. .	48,946	62,759	4,072	5,050
Minneapolis, tons. . .	9,877	9,090	371	181
Milwaukee, tons. . . .	9,389	9,128	105	1,062
Peoria, tons.	19,675	15,510	4,447	5,730
Baltimore, tons. . . .	28,223	29,200	6,383
Philadelphia, tons. . .	38,420	46,320	1,078	286
Boston, tons.	84,700	86,458	7,662	6,762

REVIEW OF CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending July 16 the receipts were 5,143 tons, against 2,661 tons the previous week. Shipments for the week were 278 tons, against 171 tons for the previous week. The market was dull and unsatisfactory throughout the week. There was a moderate inquiry for choice, sound, old Timothy hay, and as the offerings were light a steady feeling prevailed. Most of the arrivals consisted of low grades of old Timothy and Prairie and new Prairie and the market was overstocked. The demand was extremely light for these grades and receivers found it almost impossible to dispose of consignments. Sales of choice Timothy ranged at \$8.00@10.00—outside for old; No. 1, \$7.50@9.00; No. 2, \$7.50@8.00; Not Graded, \$6.00@8.50; Clover Mixed, \$7.00@7.25; Choice Prairie, \$7.00@9.50—outside for old Iowa; No. 1, \$5.75@8.00; No. 2, \$4.00@5.75; No. 3, \$3.00@4.50; No. 4, \$3.00; Not Graded, \$3.00@7.00. Rye straw sold at \$4.75@5.50, and oat straw at \$3.75@4.00.

During the week ending July 23, the receipts were 4,394 tons, against 5,143 tons for the previous week. Shipments for the week were 195 tons, against 278 tons for the previous week. The offerings of strictly choice old Timothy were small during the week and a good local inquiry existed. The market for low grades of Timothy and all descriptions of new Prairie was exceedingly dull throughout the week. Receipts were large and the demand was extremely light. Sales of Choice Timothy ranged at \$7.00@9.00 new and \$8.50@9.50 old; No. 1, \$6.50@8.00 new and \$7.50@8.25 old; No. 2, \$6.00@6.50 new and \$6.50@7.50 old; No. 3, \$6.50 new and \$7.00 old; Not Graded, \$3.00@7.00 new and \$5.00@8.00 old; No Grade, \$5.00 new; Choice Prairie, \$6.75@8.00 new and \$9.00 old; No. 1, \$4.00@6.50 new; No. 2, \$3.00@4.00 new and \$3.00@4.00 old; No. 4, \$2.25 old; Not graded, \$3.00 new. Rye straw sold at \$4.50@5.00, and oat straw at \$3.00.

During the week ending July 30 the receipts were 2,596 tons, against 4,394 tons the previous week. Shipments were 33 tons, against 195 tons the previous week. An exceedingly light business was transacted throughout the week. The arrivals showed a very material falling off and the demand was correspondingly slack. The market ruled dull throughout the week.

Sales of Choice Timothy ranged at \$7.00@8.00 new and \$9.00@9.25 old; No. 1, \$6.00@7.50 new and \$7.25@8.00 old; No. 2, \$6.50 new and \$5.00@8.00 old; No. 3, \$6.00 for new and old; Not Graded, \$5.00@7.00 new and \$6.00@8.50 old; No Grade, \$3.00@4.00 for heating. Choice Prairie, \$6.50@8.00 new; No. 1, \$4.00@7.00 new and \$3.00 old; No. 2, \$3.00@4.50 new; No.

3, \$3.00 new; No. 4, \$2.50 old; Not Graded, \$3.00 for new heating and \$5.00 for old. Oat straw sold at \$3.00.

During the week ending August 6 the receipts were 2,413 tons, against 2,596 tons the previous week. Shipments for the week were 118 tons, against 33 tons for the previous week. A very quiet market was experienced during the week and the demand was light from all sources. The daily arrivals, however, continued light and this enabled receivers to keep the market well cleaned up and also to dispose of the late accumulations. Prices exhibited no material change, although the feeling was a little firmer. Sales of Choice Timothy ranged at \$8.00@8.50 new and \$9.25 old; No. 1, \$7.25@7.50 new and \$8.00@8.50 old; No. 2, \$7.00@7.50 old; Not Graded, \$6.00@7.50 new and \$6.00 old; Choice Prairie, \$7.00@8.00 new; No. 1, \$4.00@5.50 new; No. 2, \$4.00@5.00; No. 3, \$3.00@3.50; No. 4, \$3.00. Rye straw sold at \$5.00@5.50.

TEXAS HAY DEALERS ORGANIZE.

Pursuant to a call issued by F. W. Meyer of Bonney, Texas, for all parties interested in the hay trade of Texas to meet at Houston on August 3, over forty persons were present. F. W. Meyer was made temporary chairman and stated the objects in organizing, prominent among which would be to devise ways and means for producing better hay, and ways of getting it to market to the best advantage. Those present were enrolled as members. While the committee on organization was out a very practical discussion was engaged in. The committee on organization then reported as follows:

The committee on organization of the hay dealers of the coast country suggest as follows:

1. This organization shall be known as the South Texas Hay Association.

2. Members of this Association shall consist of hay makers, hay shippers, hay dealers, hay brokers and commission men, implement dealers, and all persons in any way interested in the production and marketing of hay.

3. The officers of this Association shall consist of one president and vice president, a secretary and treasurer.

4. There shall be assessed the sum of 50 cents for each quarter as dues against each member of this Association.

5. That a committee of five shall be appointed by the chair, whose duty it shall be to draft a code of by-laws to govern this Association.

The report was adopted and the committee on by-laws appointed. Officers were then elected as follows: F. W. Meyer of Bonney, president; J. M. McGinty of Alvin, secretary; Fletcher Wilson of La Porte, vice-president; W. N. Tigner of Sandy Point, treasurer.

At the afternoon session the chairman was instructed to appoint a committee on railroad and transportation, and he named the following: H. W. Cortes of Houston, W. J. B. Moor of Alcoa, and E. D. Carter of Alvin.

It was decided to send a delegate to the National Hay Convention at Buffalo. President Meyer was selected and \$75, as his expense fund, was raised on the spot.

More practical questions were brought before the meeting than rarely come before any convention, and to keep matters moving, Monday, August 29, was selected as the date of next meeting, to be held at the Business League Rooms, Houston.

THE NATIONAL HAY ASSOCIATION CONVENTION.

The fifth annual convention of the National Hay Association, held at Buffalo, N. Y., on August 9-10-11, was the most successful of any yet held. The meeting was called to order at 10 o'clock on the 9th by President E. L. Rogers of Philadelphia, and Mayor Diehl welcomed the visitors to Buffalo in a very happy manner. Robt. R. Hefford, president of the Buffalo Merchants' Exchange, also delivered an address. The report of the directors submitted by President Rogers, showed that the Association, which was formed at Cleveland five years ago with 65 members, now has over 500 members and is prosperous. At the afternoon session the reports of the various committees were submitted and new committees on grades, membership and nominations appointed.

At the evening session the following papers were read, each followed by a discussion: "Past, Present and Future of the Hay Trade," Cyrus H. Bates, Boston, Mass.; "Hay Shipping as a Profitable Business; Is It a Thing of the Past?" A. E. Clutter, Lima, O.; "Supply and Demand as Related to the Hay Trade," Jas. T. Clendenin, Baltimore, Md.; "How the Hay Dealer of this Country Can Better His Present Condition," Geo. S. Bridge, Chicago, Ill.; "The National Hay Association—What It Has Accomplished, and Its Future," Willis Bullock, Canajoharie, N. Y.; "Freight Rates on Hay," F. W. Pitt, Baltimore, Md.; "Terminal Warehouses," D. W. Clifton, St. Louis, Mo.; "The Benefits to Be Derived from the National Hay Association," J. A. Heath, Lenox, Mich.

The second day's session was devoted principally to general discussions, new and unfinished business

and election of officers. The report of the Committee on Grades recommending that choice timothy hay shall be timothy not mixed with over one-twentieth of other grasses, properly cured, bright, natural color, sound and well mixed, and that No. 1 timothy shall not be more than one-eighth mixed with clover or other tame grasses, properly cured, good color, sound and well baled, was adopted after a hot fight in which the Eastern men were defeated. It was also decided that the next convention be held in Detroit.

On the afternoon of the 11th the delegates were entertained by the Buffalo Hay Association with a ride on Lake Erie and Niagara River.

Fires - Casualties

Gilchrist & Co.'s grain elevator at Grafton, Iowa, was destroyed by fire on July 29.

Lawson's Elevator at Kenton, Ohio, was burned July 28. Loss \$3,500; insurance \$3,000.

The grain elevator at Knobnoster, Mo., was unroofed by the heavy windstorm which swept over that town on July 29.

On July 11 a fire destroyed nearly all the business portion of Soledad, Cal., including the grain warehouse of W. H. Bingaman.

The Northwestern Grain Company's elevator at Bingham Lake, Minn., was burned recently, together with 1,000 bushels of oats.

The Detroit, Grand Rapids & Western freight house and elevator at Plymouth, Mich., was destroyed by fire on August 4. Loss about \$2,000.

The gas engine in Nutt & Wells' elevator at Urbana, Ohio, blew up one day last month, completely destroying it and injuring Mr. Wells about the arm.

Fire in C. O. Breed & Co.'s grain store at West Lynn, Mass., on July 18, caused a loss of about \$700. The loss is covered by insurance. The fire originated from a locomotive spark.

C. H. Cox's grain storehouse at Haverhill, Mass., was badly damaged by fire on July 17. Estimated damage to building, \$1,500; to hay, grain, etc., \$2,500, probably covered by insurance.

Sparks from a locomotive set fire to the roof of the Draper Elevator at Janesville, Wis., on July 28. Several hundred dollars' damage was done to the building and machinery.

The explosion of a boiler in the Niagara Starch Works plant at Buffalo, N. Y., on July 14, wrecked the building, killed the engineer and fireman and four other persons, and injured 26.

J. R. Bailey's elevator at Pierce Junction, Kans., was destroyed by fire on July 15. The elevator had been receiving new wheat for 2 days previous to the fire, the origin of which is unknown.

J. D. McFarren's grain elevator at Lewis Creek, near Columbus, Ind., burned July 30. It contained 1,500 bushels of wheat and 500 bushels of corn. Loss \$5,000, insurance \$3,200. The fire is said to have been of incendiary origin.

Grant Campbell's elevator at Atlanta, Ohio, on the Cincinnati & Muskingum Valley Railroad, was burned recently. The building is said to have contained 2,500 bushels of corn, 8,000 bushels of wheat, and a large quantity of wool, valued at about \$12,000. Insurance \$4,500.

Geo. Helm's elevator at Long View, Ill., was destroyed by fire on July 21. The building with adjoining cribs contained 7,000 bushels of corn, 4,000 of which belonged to Catlin & George, and 3,000 to W. Churchill. Mr. Helm had \$3,000 insurance on his elevator, valued at \$5,000.

The engine room of the Fowler Grain Co.'s elevator at Omaha, Nebr., was destroyed by fire on July 19. The building is operated under lease by the Pratt Grain Co. The total loss is about \$1,000. Good work of the fire department saved the elevator and its 28,000 bushels of corn.

E. A. Turner's grain warehouse at Van Alstyne, Texas, was burned July 21. The building contained 6,000 bushels of corn belonging to Mr. Turner, and 1,500 bushels of oats and 500 bushels of wheat belonging to Thompson & Berry. Mr. Turner had \$3,250 insurance, but the latter firm had none.

Geo. Beyer's grain elevator at Depue, Ill., was destroyed by fire July 25. It contained nearly 10,000 bushels of grain, nearly all of which belonged to three farmers. Mr. Beyer had \$1,000 insurance against a loss of over \$3,000. Mr. Beyer will build a dump and continue to take care of his trade.

A spark from a railroad engine in Rush County, Kansas, on July 30, started a conflagration that swept over a wide area, destroying thousands of dollars' worth of wheat in stacks, and many fields of oats ready for the harvest. William Greenway's loss was the greatest, 34 stacks of wheat, the har-

vest from 250 acres, which would have yielded nearly 7,000 bushels.

A grain elevator at Lebanon, S. Dak., belonging to the Sleepy Eye Mill Co., Sleepy Eye, Minn., was destroyed by fire recently. Ed. Stevens had just arrived to open up the house for the fall trade when the fire occurred. A 15,000-bushel house is being put up to take its place.

The Star Elevator, located in yards of the M. C. R. R. in the western part of Detroit, Mich., was destroyed by fire on July 25. The house was owned by Gilett & Hall and Carson, Craig & Co. It contained but little grain, and was valued at \$12,000, and insured for about \$9,000. It will probably be rebuilt at once.

Ed. Baldwin's grain elevator at Weston, Ohio, was destroyed by fire July 26. There was considerable new wheat in the house, and the loss is placed at about \$5,000. Insurance, \$3,000. A row of empty corn cribs belonging to Churchill & Co. were also burned. The fire is thought to have originated from the boiler furnace.

On July 19 fire destroyed T. C. Powers' grain elevator at Belgrade, Mont. The building was full of grain, mostly oats, and the total loss is placed at \$60,000, some of which will fall on the farmers who had grain in store, uninsured. The fire is supposed to have had its origin in a spark from a locomotive, as it originated in the top story.

At Dayton, Wash., on August 3 a fire destroyed six grain warehouses. The burned buildings were: The Alliance Warehouse, the Engle, the Engle & Gillis, the Broughton, and two houses belonging to the Western Warehouse Company. The total capacity of these houses was about 300,000 bushels, and about 30,000 bushels of grain was in store.

Employees of Metcalf & Co., Chicago, who have the contract to rebuild the Union Elevator, in East St. Louis, Ill., were engaged in blasting away the old foundation on August 3, when a premature discharge exploded a quantity of dynamite stored near by. Huge pieces of rock were blown through the side of the St. Louis Transfer Company's stables, killing three horses and causing damages to the extent of about \$1,000.

Nelson Heald, an employee of the Marseilles Manufacturing Company of Marseilles, Ill., fell through an elevator shaft to his death. He was engaged in lowering shellers from the third floor to the first for loading for shipment, and had a couple on a truck. The elevator was down, he reached for the rope to start it up, lost his balance and with the truck and shellers landed in a heap, forty feet below. His skull was crushed and he died in a short time after being picked up.

PERSONAL

Wm. Frick is now with the Globe Elevator Co. at West Superior, Wis.

A. A. Truax of Mt. Vernon is now located at Alexandria, S. Dak.

L. B. Hopping is buyer for the elevator at Cedar Bluffs, Nebr., this year.

P. E. Ballett of Edinburg has taken charge of the elevator at Cowden, Ill.

Thos. Finan now has charge of Z. H. Travis' grain business at Edgerton, Ohio.

Z. T. Burn has taken a position at Anchor, Ill., with the Crescent Grain Co.

Cass Brown of Darwin has charge of the new Farmers' Elevator at Dassel, Minn.

J. M. Shively is the new manager of the Shellabarger Elevator at Cerro Gordo, Ill.

Wm. R. Smith will again act as buyer for the Peavey Company at Mitchell, S. Dak.

A. Stubbs has accepted a position as manager of Fryer & Smith's elevator at Delavan, Ill.

Fred Podratz will be the buyer for the Pacific Elevator at Winthrop, Minn., this year.

John Black has taken the position of buyer for the Central Grain Co. at Burnside, Iowa.

Nat. Davis of Savanna, Ill., is now operating the Bosch-Ryan Elevator at Cedar Rapids, Iowa.

Bert Dockstader of Cawker City is assisting W. F. Hill in buying grain at Osborne, Kans.

J. O. Courtright will manage the grain warehouse of Hillstand, Warner & Co. at Pullman, Wash.

A. F. Streseman is this year acting as buyer for the Farmers' Elevator Co. at Winthrop, Minn.

E. M. E. Elkins is the manager of J. P. Baden's new elevator and feed mill at Newkirk, Okla.

J. J. Daley has taken charge of the Middle Division Elevator at Wapella, Ill., superseding V. R. St.

John, who will make his headquarters at Bloomington and travel for the company.

George H. Webster, an old partner of Armour & Co., is now president of the Armour Elevator Co.

Secretary Stone has been granted a two months' vacation by the Chicago Board of Trade directors.

Nele Steele has returned to Howard, S. Dak., and opened A. E. Rippe's grain warehouse for business.

F. C. Miller, the grain dealer at Kernan, Ill., was badly injured recently by being thrown from a horse.

L. J. Larson of Winthrop, has opened the grain warehouse at Lafayette, Minn., for handling the new crop.

W. R. Mathews is in charge of the Cargill Elevator at De Pere, Wis., which was reopened on August 1.

F. B. Heiker has resigned his position as manager of the elevator at Radcliffe, Iowa, and will go to Oklahoma.

Walter D. Stearns of Fitchburg, Mass., has taken charge of a branch grain store at Worcester for Coleman & Drury.

A. G. Hahn of Elkton, S. Dak., has been assigned this year by the Northwestern Elevator Co. as buyer at Watertown.

Washington Holmes will manage the new elevator at Duxbury, S. Dak., as he has managed the warehouse which it replaces.

Robert Lindblom, the well-known Chicago Board of Trade man, is visiting his daughters in Sweden for a couple of months.

J. H. Dudley of Morris, Minn., has accepted a position as manager of the Duluth Elevator Co.'s elevator at Hillsboro, N. Dak.

Ed. Stevens of Sleepy Eye, Minn., will act as buyer at the new elevator at Lebanon, S. Dak., owned by the Sleepy Eye Mill Co.

F. L. Wheeler is now located at Scotland, S. Dak., where he is engaged in the grain and coal business. He moved from Howard recently.

I. B. Olson has resigned his position in an elevator at Grafton, N. Dak., and moved to Mackinock, where he has purchased business interests.

T. M. Bowers, who was for several years in charge of the elevator at Wheeler Station, Minn., takes charge this year of the M. & D. Elevator at Barry.

W. R. Williams, for several years in the employ of the Huntington Elevator Co., will have charge of the company's business at Taopi, Minn., this year.

J. W. Raymond has succeeded T. Y. Williams as manager of the Tacoma Grain Company's warehouses at Oakesdale, Belmont and McCoy's Siding, Wash.

G. E. Fuller, for 10 years with the grain department of Bartlett, Frazier & Co., took charge on July 20 of the cash grain business of Peavey & Co. at Chicago.

E. W. Calkins has withdrawn from the Whitman Grain & Coal Co. at North Abington, Mass., of which he was general manager, and will enter new business.

Allan B. Wallace, of the grain firm of Smith & Wallace, Newark, N. J., has been appointed major of the Third Battalion, Fourth Infantry, New Jersey Volunteers.

J. H. Ware, of the firm of Ware & Leland of Chicago, has just returned from a three months' trip to Europe, where he went to establish foreign connections for his house.

William R. McQuillan, of the Union Grain & Hay Company, Cincinnati, was roundly congratulated recently on the receipt of the news that there had arrived at his home a new girl baby.

John C. Legg was recently reelected chairman of the Baltimore Chamber of Commerce wheat committee, John W. Snyder, of the corn committee, and Emory Kirwan, of the oats committee.

Governor Tanner has appointed William Kilpatrick of Chicago secretary of the Illinois Railroad and Warehouse Commission, to succeed B. B. Ray, who resigned a few months ago to accept a position as paymaster in the United States Army.

The many friends along the Wabash Railroad, of E. A. Flemming, division freight agent of the road, with headquarters at Springfield, Ill., will be sorry to learn that he is at Indiana Mineral Springs at Attica, Ind., suffering from an attack of rheumatism.

Farmers in Sherman County, Iowa, have organized a hail insurance society, the mutual agreement being that the party injured shall receive for his grain destroyed by hail one per cent of the grain raised by other members of the company.

Court Decisions

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Can Mortgage Unplanted Crops in North Dakota.

In the recent case of Donovan against the St. Anthony & Dakota Elevator Company, the Supreme Court of North Dakota holds, 75 Northwestern Reporter, 809, that, under section 4680 of the Revised Codes, a valid mortgage may be made upon an unplanted crop, in that state, and will attach thereto as a lien as soon as the same comes into existence by the agency of the mortgagor, and that a holder of a mortgage of that character, having a present right of possession to grain, after it is grown, may maintain an action against a wrongdoer for the conversion of the grain embraced in the mortgage.

Bound by Uniform Bill of Lading Conditions.

An action brought against a carrier to recover for loss sustained by reason of the destruction, in its warehouse, while awaiting shipment, of certain flour, by fire, was made to turn on the decision of the point as to whether or not the provisions of the Official Classification imposing the limitations of the Uniform Bill of Lading on the rate named in the tariff sheet governed the shipment.

It was argued, on the one hand, that the carrier was liable as insurer, as at common law, notwithstanding the provision to the contrary in the bill of lading, because the flour was specifically classified in the tariff sheet, and it was not necessary to refer to the Official Classification in order to ascertain its class, the words in the tariff sheet, "subject to Official Classification," not applying. And it was further contended that it was the duty of the carrier to make and publish a rate with full common-law liability, and this could be done only by stating upon the tariff sheet the common-law rate, either in figures, or by some appropriate language; that the words, "subject to Official Classification," did not inform the shipper that he was to look any further than the tariff sheet for the rate, so as to bind him by a provision in the classification making the rate 20 per cent higher than that named on the tariff sheet if shipment were not made subject to the conditions of the Uniform Bill of Lading.

The conclusion sought to be drawn from the proposition that no rates with full common-law liability were ever made and published, was that it was the duty of the carrier to make and publish such rates; and, if only one schedule of rates was ever made and published, that must necessarily have involved full common-law liability, notwithstanding anything in the schedule or the bill of lading to the contrary.

But the Supreme Court of Minnesota decides against these contentions, holding, Mannheim Insurance Co. v. Erie & Western Transportation Co., 75 N. W. Rep. 602, that the reference in the rate sheet to the Official Classification made the latter a component and concomitant part of the schedule of rates, and that this was a making and establishing of schedules of rates both under the Uniform Bill of Lading and also under the full common-law liability.

It also maintains, that, even if the rates under the full common-law liability were unreasonable and exorbitant, this fact would not render the rates under the limited liability invalid, provided they were themselves reasonable.

Liability for Destruction of Grain on Tracks of Transfer Company.

It was the custom of a railway company using the track facilities of an independent terminal company to place cars on the tracks of the latter and leave them there, after sending prompt notice to the consignee, until the consignee should indicate the particular point where he wanted delivery made, or to which he wanted the shipments forwarded, when the railway company would make out and deliver to the terminal company a new waybill, on which that company would transfer the car as directed.

Now, if the facts were simply that under the agreement between the railway company and the transfer company for the latter to furnish the former with yard and track facilities, and in accordance with the custom which had grown up, cars from the road were taken by the terminal company and placed upon its tracks, and permitted to remain there until the railway company, at the request of the consignee, should make out and deliver to the terminal company new waybills showing a particular destination, the United States Circuit Court of Appeals suggests that it would, perhaps, be true that the responsibility of the railway company for the cars in question, with their contents of barley, which were destroyed by fire, on the terminal company's tracks, had not ceased, because the waybills under which they could have been transferred had not been made out.

But it appearing, besides the fact of the custom,

that the shipments of barley referred to were made to or by way of that terminal point in order that the cars should come into the possession of the terminal company for transfer in pursuance of an understanding amounting to an agreement between that company and the consignee that the company should hold the cars on its tracks, and afford other facilities about its yards, until the consignee should sell the barley and determine and give notice to what point transfer should be made, the court holds that delivery to the terminal company relieved the railway company of liability without regard to any delay in making out new waybills.

The court maintains that the agreement last mentioned was equivalent to a specific direction by the consignee upon the receipt of each car by the terminal company that the car should be held for further orders; and that in that situation, whatever otherwise might have been the railway company's duty, it was under no obligation to notify the consignee of the arrival of a car, and it was not material whether such notice was given or not.

The consignee, whether buyer of the grain or agent of the shippers, the court further insists, Bosworth against the Chicago, Milwaukee & St. Paul Railway Company, 87 Federal Reporter, 72, had authority, in the absence of notice to the contrary, to direct what disposition should be made of the cars on their arrival at the terminal point; and that the legal result was the same as if the terminal company's possession and detention of the cars had been with the consent or by direction of the shippers.

No liability as common carrier, it is said, could attach to the terminal association until a forward movement or transfer of the cars should be ordered, so, it would seem, its liability was, in the meantime, that of a warehouseman, or bailee for hire.

The EXCHANGES

P. R. Wilpoite has been re-elected grain inspector at Chattanooga for the year ending June, 1899.

No session of the Board of Trade was held at Kansas City on August 6, that day having been selected as Kansas City Day at the Omaha Exposition.

The grain and hay men of the Cincinnati Chamber of Commerce are highly pleased at the appointment of John S. Furlong as city weigher. A special delegation waited on the Mayor to express their satisfaction of his action.

The Grain, Hay and Feed Receivers' Association of Cincinnati has made an amendment to the principal rule of the organization, extending the time in which customers can make settlement before being listed, from 12 o'clock of the second day following purchase, to 1 o'clock. This makes practically another day.

The Montreal Corn Exchange has a membership which represents an annual export business of \$47,000,000 to \$50,000,000. It is amalgamated with the Board of Trade but has distinct business sessions open only to members, who pay an extra fee of \$10 per year. There is talk of raising the annual dues of the Board and then giving all members the privileges of the Corn Exchange.

A Call Board has been inaugurated by members of the Montreal Board of Trade and Corn Exchange for the purpose of dealing in wheat, corn, oats, pork, lard, short ribs, seeds, etc., also New York stocks, British Consols, French three per cents and Spanish fours. The object of the above board is to save Chicago and New York commissions, and to confine the profits and losses to Montreal. Sessions of the Board are held every afternoon.

The Grain Inspection Committee of the Cincinnati Chamber of Commerce was called upon a few days ago to settle a dispute between Rieker & Lippert and W. H. Kramer. The former firm sold to Mr. Kramer a car of oats that were to be old oats. Complaint was made that there were enough new oats in the stock to make the car grade new oats, and upon inspection by the committee this was found to be the case, and it was decided that Rieker & Lippert should refund the difference in price between old and new oats.

John Hill Jr. has for some time been receiving hearty support from the Chicago Board of Trade for his vigorous crusade against the bucket shops, in his capacity as chairman of the Anti-Bucket Shop Committee. Mr. Hill has also been actively engaged as chairman of the Anti-Gambling Committee of the Civic Federation of Chicago. In this work also he was not opposed by the members until he commenced a campaign against pool selling at the Washington Park Club races. A majority of the members of this club are also members of the Board of Trade and influences were at once brought to bear that compelled Mr. Hill to resign from the Board of Trade committee. At a meeting of the Board of Directors his resigna-

tion was accepted by a vote of 12 to 2, President Carter and Wm. N. Eckhardt standing by Mr. Hill to the end. The discussion on this question lasted nearly an hour, and all recognized Mr. Hill's efficiency in working against gambling that interfered with their business, but when it came to suppressing gambling connected with their interests or pleasure, they would have none of it. President Carter has just appointed a new committee composed of James Nicol, Henry O. Parker and W. N. Eckhardt.

Items from Abroad

Beerbohm estimates that America will be called upon to furnish 176,000,000 bushels of wheat in 1898-99.

Recent reports from India say that rains have fallen throughout that country and all fears of famine are allayed.

During the first five months of this year Argentina exported 136,776 tons of flaxseed, compared with 155,423 tons in the same period of 1897.

Rumania, which has a considerable wheat export trade with Western Europe, raised scarcely 50,000,000 bushels last year, while its normal crop is 69,000,000 bushels.

Usually Mexico does not raise enough wheat for its own use, but this year the crop is so abundant that some can be spared for export. It is not likely that any export duty will be imposed.

A recent cablegram from Madrid, Spain, says: The harvest prospects are so good throughout the peninsula that the government has decided to revoke the prohibition against the export of grain and to substitute therefor a moderate export duty.

Last year the Locust Extinction Commission of Argentina had a fund of six or seven million dollars to draw on, but this year their work is likely to be crippled for lack of funds. In some districts the locusts have already appeared in formidable numbers. The only relief through the commission appears to be to add to the already heavy taxes borne by the agriculturists.

Corn, which at present constitutes one of the principal articles of export from the Argentine Republic, has advanced from a crop of 8,038 tons in 1873, to 1,500,000 tons in 1896. The province of Buenos Ayres is especially adapted, by reason of its climatic conditions, to the culture of this cereal, the exportation of which began long before that of wheat. The area planted in corn was, in 1891, only 251,245 acres, while in 1895 1,796,577 acres, producing 247,000,000 bushels, was under cultivation.

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the five weeks ending August 1, for the last three years, according to the Cincinnati Price Current were as follows:

	1898.	1897.	1896.
St. Louis.....	1,189,000	1,273,000	2,438,000
Toledo.....	2,728,000	1,009,000	1,994,000
Detroit.....	320,000	120,000	343,000
Kansas City.....	1,972,000	2,592,000	604,000
Cincinnati.....	93,000	119,000	144,000
Winter.....	5,902,000	5,113,000	4,922,000
Chicago.....	993,000	826,000	2,690,000
Milwaukee.....	366,000	614,000	585,000
Minneapolis.....	1,121,000	4,192,000	3,725,000
Duluth.....	557,000	2,742,000	5,186,000
Spring.....	3,097,000	8,381,000	12,176,300
Total. bus. 5 weeks....	8,999,000	13,494,000	17,093,000



"It will be a hot race from now on. Which will win?"—Zahm's Circular.

PRESS COMMENT

A CALL FOR C. WOOD DAVIS.

The wheat market continues to weaken in spite of the shortage in many places. Will C. Wood Davis please rise and explain?—Implement Trade Journal.

TO ROUND OUT PROSPERITY.

A good corn crop is needed this year in Kansas, not because the state cannot get along very well with a moderate yield, but because it would mean increased wealth for the producers in the form of fat cattle, hogs, sheep and poultry.—Kansas City Times.

HIGH ART ON POSTAGE STAMPS.

The scenes on the new postage stamps are delightfully dim. On the two-cent stamp, for instance, it would bother the engraver himself to tell whether the line of machines at work are sulky plows, mowers or self-binders, and it's even money that the artist didn't know the difference between them.—Farm Implement News.

COMES OUT OF THE GROUND.

Eight hundred million dollars of European money tells the story of unparalleled prosperity for the American farmers. This enormous sum, which represents the dependence of Europe upon American breadstuffs, also accounts for a large portion of the increase in the volume of general business transacted all over the country.—Corn Belt.

ONE INEXORABLE LAW.

Save for exceptional periods the speculator is absolutely helpless in the actual making of prices, while the most he can do is to try to guess what sort of prices the natural conditions will make for him. It is pleasant thus to know that there are some laws which the most daring manipulator may not dare to assume to violate with impunity.—Chicago News.

BULLISH ON WHEAT.

Prophets of lower prices should remember that prices are already low. Sudden breaks in the speculative markets are to be looked for, of course; but breaks from present market figures ought not to be permanent. Northwestern farmers ought to be safe in calculating that they will have frequent opportunities to sell their crop for better than present figures during the present crop year.—Minneapolis Tribune.

NUDGING THE BOARD.

The directorate of the Chicago Board of Trade has taken steps toward the appointment of a committee of three to continue the prosecution of bucket shops. The crusade carried on for a year or more has resulted in the indictment of a large number of these mushroom concerns. Let this executive board now attack the trade in "puts" and "calls" in an equally vigorous manner, and see what can be done in abolishing that feature of speculation, which is never officially recognized, yet quietly winked at.—Orange Judd Farmer.

WHY THE FARMER WAITS.

The light interior movement of wheat and the rising trend of the markets go together as cause and effect. The prosperity of the wheat grower last year projects its influence into the farmer's policy with reference to the marketing of this season's crop. He can afford to wait a while before he sells the product of his fields; and the limited shipments of wheat to primary markets show that he is disposed to do so. It is with wool as with wheat. The Western producer has abundant faith in the business results of an agricultural prosperity with which he is in immediate touch.—Philadelphia Record.

THEIR INTERESTS IDENTICAL.

It is claimed that a prejudice exists among the farmers against the shippers. If true that is a very silly prejudice. It is admitted that some shippers deserve no man's confidence, but the shipper who has business sense knows his interests to be identical with those of the producer. His profits are made by handling grain. The more he handles the larger his profits. The more the producer gets for his grain the larger will be the production and so the more will the shipper handle. The shipper who listens to the propositions of the railroads to abandon the interests of the shipper in consideration of a few personal favors or a little money is, from a business standpoint, foolish. He joins an effort to reduce his own earnings. Well may the farmer distrust such a man. He lacks honesty and sense alike. On the other hand, it is equal folly for the producer to stand indifferent or hostile to those shippers who are fighting the battle which,

if won, will put money in the farmer's purse every time he takes a load of grain to market. This fight is the producer's fight. If success attends it, he makes dollars, where others—even the shipper—makes cents.—Rate Review.

THE CORN PROPAGANDA.

The Western farmer may well rejoice that the great commercial bodies of the East are working with him hand and glove to promote the foreign outlet for our surplus corn. Following the combination for this purpose among the agricultural, industrial and business interests of Maryland and Baltimore, comes the New York Chamber of Commerce support for this movement. The American Maize Propaganda seems to be getting there with both feet. That's the way to do it! When the farmers pitch in and help themselves on business principles they accomplish something, whereas if they depend on politicians they usually get left.—Orange Judd Farmer.

Late Patents

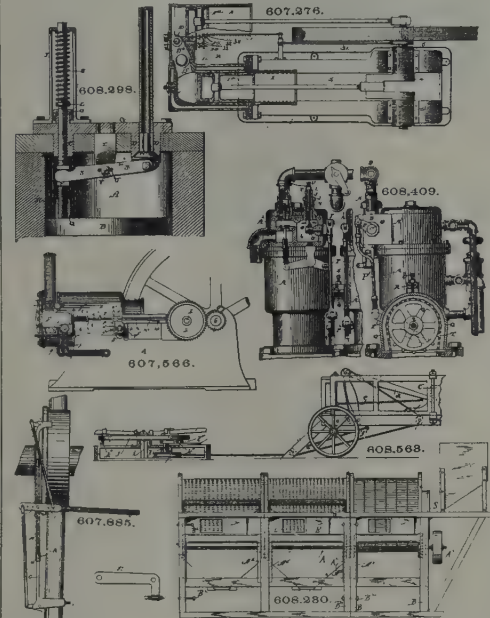
Issued on July 12, 1898.

Gas Engine.—Joseph Reid, Oil City, Pa. No. 607,276. Filed Jan. 25, 1895. See cut.

Issued on July 19, 1898.

Gas Engine.—Madison F. Bates, Lansing, Mich. No. 607,536. Filed Nov. 9, 1896.

Gas Engine.—Charles Jacobson, Erie, Pa. No. 607,566. Filed Dec. 2, 1896. See cut.



Hydrocarbon Gas Engine.—Wm. O. Worth, Benton Harbor, Mich. No. 607,613. Filed July 1, 1895. Renewed July 3, 1897.

Gas Engine.—Levi J. Wing, New York, N. Y. No. 607,580. Filed Dec. 22, 1896.

Issued on July 26, 1898.

Gas Engine.—Chas. Quast, Marion, Ohio. No. 607,878. Filed Sept. 15, 1894.

Gas Engine.—Chas. Quast, Bucyrus, Ohio. No. 607,879. Filed Jan. 5, 1895.

Car Mover.—Geo. W. Rittenhouse and Franklin Miller, Indianola, Ill. No. 607,885. Filed June 23, 1897. See cut.

Gas Engine.—Wm. J. Wright, Pittsburg, Pa. No. 607,903. Filed April 26, 1897.

Gas Engine.—Wm. J. Wright, Pittsburg, Pa. No. 607,904. Filed May 20, 1897.

Separator.—Robt. W. Jessup, San Francisco, Cal., assignor of one-half to F. H. Wheelan, same place. No. 608,049. Filed Aug. 26, 1897. Patented in England, Feb. 2, 1897, No. 2,725.

Issued on Aug. 2, 1898.

Baling Press.—Norman B. Wilder, Lyndon, Ill., assignor of one-half to H. E. Paddock and W. F. Millikan, Prophetstown, Ill. No. 608,563. Original application filed March 26, 1897. See cut.

Igniting Mechanism for Explosive Engines.—Joseph Lizotte, Quincy, Mass., assignor of one-half to Mellen N. Bray, Boston, Mass. No. 608,409. Original application filed June 28, 1897. See cut.

Gas Engine.—John J. Ohrt, Burlington, Iowa. No. 608,298. Filed March 5, 1897. Renewed June 22, 1898. See cut.

Grain Feeder and Conveyor.—Boston S. Constant, Bloomington, Ill. No. 608,180. Filed May 11, 1896. Renewed Jan. 28, 1898.

Pea Separating Machine.—Robt. P. Scott, Cadiz, Ohio, and John A. Chisholm, Oakville, Canada. No. 608,230. Filed March 11, 1897. See cut.

RECENT SALES OF ELEVATOR MACHINERY.

The following is a partial list of sales of elevator machinery made by the Barnard & Leas Mfg. Company, Moline, Ill., during the month of July:

ILLINOIS: Fairbanks, Morse & Co., Chicago, one No. 2 Elevator Separator, one No. 4 Warehouse Separator, one No. 2 Victor Corn Sheller, one No. 2 Cornwall Corn Cleaner, one No. 3 Warehouse Separator. Webster Mfg. Co., Chicago, one No. 68 new style Oat Clipper, five No. 4 Elevator Separators, one No. 0 Victor Combined Sheller and Cleaner. Weller Mfg. Co., Chicago, one No. 1 Victor Corn Sheller, one No. 2 Victor Corn Sheller. Henry Keiser Co., Bloomington, one No. 2 Victor Corn Sheller, one No. 2 Cornwall Corn Cleaner. M. C. Woodworth, Winchester, one No. 2 Little Victor Corn Sheller and Cleaner.

INDIANA: Risser & Rich, Oxford, one No. 3 Cornwall Corn Cleaner. F. Rose, Brookston, one No. 65 New Method Oat Clipper. W. Nading, St. Paul, one No. 2 Cornwall Corn Cleaner.

IOWA: Walnut Mill Co., Walnut, one No. 35 Special Grain Separator, pulleys, belt, etc. D. Bradley & Co., Council Bluffs, one No. 3 Cornwall Corn Cleaner, one No. 1 Victor Corn Sheller, one No. 3 Wh. Separator, one No. 1 Cornwall Corn Cleaner. W. P. Adams, Odebolt, one No. 3 Victor Corn Sheller, one No. 4 Cornwall Corn Cleaner, one No. 1 Elevator Separator. St. Paul & K. C. Grain Co., Tama, one No. 1 Victor Corn Sheller, and one No. 1 Cornwall Corn Cleaner. C. Counselman & Co., Lena, one No. 1 Victor Corn Sheller, one No. 1 Corn Cleaner. C. Counselman & Co., Callendar, one No. 1 Victor Corn Sheller, one No. 1 Cornwall Corn Cleaner. John Struve, Lyons, one No. 2 Little Victor Corn Sheller and Cleaner. Globe Machinery & Supply Co., Des Moines, one No. 2 Victor Corn Sheller. St. P. & K. C. Grain Co., Manila, one No. 1 Victor Corn Sheller, one No. 1 Cornwall Corn Cleaner.

GEORGIA: McCaw Mfg. Co., Macon, two cotton seed hull packers.

KANSAS: Pearl Roller Mill, Oswego, one No. 2 W. H. Scourer. La Crosse Lumber & Grain Co., La Crosse, one No. 1 Elevator Separator. Stuart Hare, Receiver, Enterprise, one No. 2 Oat Clipper. J. S. Stevens, Dalton, one No. 33 Special Grain Separator.

LOUISIANA: Acadia Rice Mill, Rayne, one No. 35 Special Grain Separator.

MANITOBA: Waterous Eng. Works Co., Winnipeg, one No. 37 Special Grain Separator, two No. 36 Special Grain Separators.

MINNESOTA: M. Gunderson, Kenyon, one No. 4 Wh. Separator. G. W. Van Dusen & Co., Canby, one No. 10 Horizontal Scourer.

MISSOURI: W. J. Baird, McKittrick, one No. 5 W. H. Separator, conveyors, pulleys, etc. Frank Kaucher, St. Joseph, one No. 2 Cornwall Corn Cleaner.

NEBRASKA: Seeley, Son & Co., Fremont, one No. 1 Victor Corn Sheller, two No. 1 Cornwall Corn Cleaners. J. A. Campbell & Son, Lincoln, two No. 2 Victor Corn Shellers, one No. 4 Cornwall Corn Cleaner, sprocket, etc. W. W. Cameron, Chester, one No. 2 Cornwall Corn Cleaner. H. H. Esterday, McCook, one No. 3 W. H. Separator.

NEW YORK: Neidlinger & Son, New York, one No. 10 Cyclone Dust Collector. Yaryan Co., New York, one No. 1 Little Victor Sheller and Cleaner.

TEXAS: Wichita Mill & El. Co., Wichita Falls, one No. 3 Elevator Separator.

VIRGINIA: J. J. Triplate, Mt. Jackson, one No. 2 Revolving Separator.

WISCONSIN: E. H. Pease Mfg. Co., Racine, one No. 3 Cornwall Corn Cleaner.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

REPRESENTATIVES WANTED.

Millwrights, machinery dealers and manufacturers' agents wanted to represent us in their territory, on commission, for the sale of elevating, conveying and power transmitting machinery, mill and elevator supplies. Address

WELLER MFG. CO., 118 and 120 North Ave., Chicago, Ill.

LINE OF ELEVATORS WANTED.

Wanted, to lease a line of elevators in a good grain territory. Describe property. Address
P. O. BOX 424, Des Moines, Iowa.

POSITION AS SUPERINTENDENT WANTED.

Position wanted as superintendent or foreman of grain elevator, either large or small house. Thoroughly understand handling, grading and mixing of grain. Have had ample experience, and can furnish good references. Address
SUPERINTENDENT OR FOREMAN, Box 3,
"American Elevator and Grain Trade," Chicago, Ill.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

ELEVATOR FOR SALE OR TRADE.

Will sell, or trade for a good farm, my elevator well supplied with the necessary machinery for shelling, cleaning, grinding and handling all kinds of grain. Located in the heart of the corn belt. Address
W. J., Box 6, "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE CHEAP.

Docks suitable for elevator purposes. To those interested in the grain trade Tonawanda, N. Y., offers unsurpassed facilities for the transferring of grain from lake vessels to canal boats and to the several railroads. The undersigned has two fine sections of dock which he will sell very reasonable. This property fronts the river over one thousand feet, with ample water for the largest vessels, and has railroad running entire length, also canal privileges the entire length. Anyone wishing to put up an elevator will find this property a bargain. Address
M. M. SMITH, North Tonawanda, N. Y.

Knowledge is Horse Power.**FEATURES OF****Modern Machinery****FOR AUGUST.**

Pneumatic Steering Gear of the United States Monitor "Terror." By H. A. Spiller. (Illustrated.)

Thinking by Machinery. Mechanical Devices for Solving Problems without the Laborious Process of Mental Calculation. By E. Ralph Estep. (Illustrated.)

Liquid Air as a Commercial Product. (Illustrated.)

Device for Reheating Compressed Air for Use in Pumps. By E. A. Rix. (Illustrated.)

Types of Rotary Motors. Some of the More Notable Efforts in the Field in which the Achievements of Parsons have, Lord Kelvin says, Placed his Name next to that of Watt. By W. E. Willis. (Illustrated.)

Gas Producers and the Future of the Gas Engine. By A. Bement. Second Article. (Illustrated.)

Amalgamation and the General Care of Gold Mills. By W. J. Adams. Second Article. (Illustrated.)

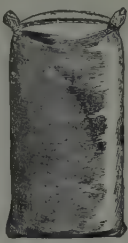
Steam Fitting in Power Plants. By W. H. Wakeman. Second Article. (Illustrated.)

The Knowledge You Need in Your Business You will find in "Modern Machinery Hall." This Knowledge is Horse Power.

Price: PER YEAR, \$1.00. PER COPY, 10c. AGENTS WANTED

For Sale by Newsdealers.

Modern Machinery Publishing Co.,
CHICAGO.

**GRAIN BAGS—BURLAPS.**

All kinds of Bags,
New and Second Hand.

ORDERS FILLED PROMPTLY.

W. J. JOHNSTON,

Factory and Office,
182 Jackson Street, CHICAGO.

ROOFING AND SIDING.**The Garry Iron and Steel Roofing Co.,**

168 MERWIN STREET, CLEVELAND, O.,

MANUFACTURES

Steel Roofing,
Corrugated Iron,
Siding and Metal
Ceiling.

SEND
FOR CATALOGUE



Write us for Catalogue and
Low Prices on best

STEEL ROOFING, CORRUGATED IRON, ETC.

We are large manufacturers of these goods and can save you money.

SYKES STEEL ROOFING CO.,
611 So. Morgan St., Chicago, Ill.,
and Niles, Ohio

GUARANTY STORAGE WARRANT COMPANY.

Capital and Surplus, \$225,000.

OFFICES:

NO. 189 LA SALLE ST. (CALUMET BLDG.), CHICAGO.

STORAGE WARRANTS

Which are Used for Purposes of Sale or Collateral, Issued on

Wheat, Oats, Corn, and Mill Products,

Contained in Owners'

ELEVATORS, WAREHOUSES AND CRIBS.

These Storage Warrants (sometimes called Warehouse Receipts), are used to secure loans and to facilitate the sale and delivery of the property they represent. They are especially well adapted to the grain trade where grain is carried at local railway stations and junction points; the property remaining where stored at nominal cost until price satisfactory to the warrant holder can be secured.

Write for Grain Dealers' Circular.

Golf Suits or Swell Clothes

May be worn at pleasure by the Four Hundred or the Four Thousand, at any one of the nine hundred and ninety-nine delightful summer resorts along the lines of the Chicago, Milwaukee & St. Paul Railway in the cool regions of Wisconsin, Minnesota, Iowa and Michigan, not omitting the famous Excelsior Springs of Missouri.

Within three hours' ride of Chicago are some of the most beautiful lakes and country resorts in Wisconsin. Oconomowoc, Waukesha and Delevan are among the list. A little farther away are Elkhart Lake and the Dells of the Wisconsin River; and beyond are Marquette—with its magnificent Hotel Superior—Minocqua, Star Lake, Lake Minnetonka, Lake Okoboji, Spirit Lake and hundreds of other deliciously inviting and invigorating spots where energy will be revived and life prolonged by a visit of a few days or a sojourn of a few weeks.

The season opens early in June and lasts until late in September.

Excursion tickets are sold every day during the summer months. Our summer guide book with list of hotels and boarding houses will be sent free upon application to Geo. H. Heafford, General Passenger Agent, Old Colony Building, Chicago, Ill.

E. R. Ulrich & Sons,

SHIPPERS OF

WESTERN GRAIN,

ESPECIALLY

High Grade White and Yellow Corn.

Elevators through Central Illinois on Wabash Ry., Chicago & Alton Ry., C. P. & St. L. Ry., and St. L., C. & St. P. Ry.

Main Office, 6th Floor, Illinois National Bank Building,

SPRINGFIELD, ILLINOIS.

Write for prices delivered. We do not care to make prices south of the Ohio River, on account of the freights.

COMMISSION CARDS.

[We will not knowingly publish the advertisement of a bucket-shop keeper or irresponsible dealer.]

M. F. BARINGER,

...SUCCESSOR TO...

J. R. TOMLINSON & CO.

...GRAIN AND MILL FEED...

416-418 Bourse Bldg., Philadelphia, Pa.

Correspondence with millers and grain dealers solicited. Sight draft with bills of lading attached honored on all shipments.

Pratt-Baxter Grain Co.,

TAYLORVILLE, ILL.

Stations on Wabash Railway.

SHIPPERS OF WHEAT, CORN AND OATS.

Specialty of White and Yellow Corn,
Fresh from Farmers.

Max Lubliner & Co., Antwerp, Belgium.
Max Lubliner, Ghent, Belgium. Established in 1879.

GRAIN DEALERS AND AGENTS.

Deal both with merchants and large mills in the interior, in wheat, corn, barley, buckwheat, flaxseed, oil cakes, bran, etc. Are obtaining generally the best prices in their market. Advances on consignments.

ARMOUR & CO.,

205 LA SALLE STREET,
CHICAGO.

GRAIN BUYERS AND DEALERS.

J. A. YANTIS,
GRAIN and MILL FEED.

CORRESPONDENCE ESPECIALLY SOLICITED
WITH SHIPPERS OF

CLIPPED WHITE OATS AND YELLOW CORN.

Also want to BUY Feed Wheat, Feed Barley, and
Clean Barley Screenings.

Prompt Attention to all Inquiries.

Room 609 Chamber of Commerce, BOSTON, MASS.

Consign Your Grain and Seeds

— TO —

WARE & LELAND,

COMMISSION MERCHANTS,

234 La Salle Street, - - CHICAGO.

Orders for future delivery executed on margin.

Edward G. Heeman in charge of Receiving Department.

COMMISSION CARDS.

B. WARREN.

B. WARREN JR.

WARREN & CO.,
Grain Commission Merchants,

ROOMS 7 AND 9 CHAMBER OF COMMERCE,

Peoria, Ill.

F. W. RUNDELL.

ESTABLISHED 1877.

J. E. RUNDELL.

W. A. RUNDELL & CO.

We buy, delivered Toledo, or f. o. b. your own track, always paying highest market prices. We also give personal attention to consignments. We were brought up in the business. If you are a consignor send your shipments to us. We guarantee you as good satisfaction as you can get anywhere, and at the lowest possible rates.

Correspondence solicited. Ask for daily market letter.

Room 4 Produce Exchange, Toledo, Ohio.

EDWARD P. MERRILL,

Mills' Agent.

Flour, Grain and Mill Feed.

OFFICE:

2 1-2 Union Wharf, PORTLAND, MAINE.

No consignments wanted.
Letters Promptly Answered.

I want a good Corn Account.

J. F. ZAHM.

F. W. JAEGER.

F. MAYER

ESTABLISHED 1879.

J. F. ZAHM & CO.,

GRAIN AND SEEDS,

TOLEDO, OHIO.

SEND FOR OUR RED LETTER. . .

**F. H. PEAVEY & CO.,**

Minneapolis,

GRAIN RECEIVERS.

Minn.

Consignments Solicited.

MILLING WHEAT A SPECIALTY.

COLLINS & Co.,

STRICTLY COMMISSION

Grain, Hay and Mill Feed.

CINCINNATI, OHIO.**Bernier & Company,**

WHOLESALE DEALERS IN

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St. Hyacinthe, Quebec, Canada.

CONRAD KIPP.

E. A. GRUBBS.

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ESTABLISHED 1886

Grain

Membership in Cincinnati Chamber Commerce

Specialty: Milling Wheat.

Reference, by permission,
Farmers' National Bank.**Co. GRAIN, HAY, STRAW.**Correspondence from Mills and
Wholesale Dealers solicited.GREENVILLE,
OHIO.**COMMISSION CARDS.**

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L. Bartlett & Son,

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Careful attention given to orders from Brewers, Malsters and Millers

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HAY, GRAIN AND FEED.

CONSIGNMENTS SOLICITED.

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D. D. HALL.

TYNG, HALL & CO.,

Grain and Commission Merchants

ROOMS 33 AND 35 CHAMBER OF COMMERCE,

Peoria, Illinois.

Members Chicago Board of Trade.

JAMES P. SMITH & CO.,

GRAIN,

417-418 Rialto Building, CHICAGO.

McKNIGHT & CO.,

Grain Commission Merchants,

ROOMS 23-245 DISPATCH BUILDING,
COLUMBUS, OHIO.

CORRESPONDENCE SOLICITED.

L. F. Miller & Sons,

RECEIVERS AND SHIPPERS OF

GRAIN, FEED, SEEDS, HAY, ETC.

OFFICE 2933 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED.

ELEVATOR AND WAREHOUSE, GERMANTOWN JCT., P. R. R.

References: { Manufacturers National Bank, Philadelphia, Pa.
Union National Bank, Westminster, Md.**E. L. ROGERS & CO.,**ESTABLISHED
1863.COMMISSION
MERCHANTS,

RECEIVERS AND EXPORTERS

GRAIN, Flour, Seed, Hay and Straw,

358 Bourse Building, PHILADELPHIA, PA.

Liberal advances made on consignments. Market reports furnished gratuitously on application. Correspondence solicited.

References: { Corn Exchange National Bank.
Manufacturers National Bank.
Merchants National Bank.**A. R. CLOUGH,**

MILLER'S AGENT,

GRAIN AND MILL FEED,

Board of Trade Rooms, Manchester, N. H.

Letters promptly answered. All sales direct.
I want a good Toledo corn account.**COMMISSION CARDS.**

ESTABLISHED 1865.

L. EVERINGHAM & Co.,

Commission Merchants.

ORDERS AND CONSIGNMENTS SOLICITED.

GRAIN AND SEEDS OF ALL KINDS

For Cash and Future Delivery.

Suite 80 Board of Trade, - - CHICAGO, ILL.

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SUCCESSORS TO

Redmond Cleary Commission Co.

Established 1854.

Incorporated 1887.

Grain, Hay and Seeds,

Chamber of Commerce, ST. LOUIS, MO.

**GEO. N. REINHARDT & CO.**

MELROSE STATION, NEW YORK CITY.



We sell on Commission and buy direct,

HAY, GRAIN AND FEED.

Storage capacity 8,000 bales, 30,000 bushels
Let us know what you have to offer.**SAMUEL R. BACKUS****& CO.**If you wish to Buy, Sell or
Consign, write to us.
Will make track bids.
Advance on Consignments.

Locations for Industries at Chicago.

Industries located on the line of The Belt Railway Co. of Chicago, are afforded unequal switching facilities and the advantage of connecting with all Chicago railroads. They have the benefit of competitive rates and an abundant supply of cars for shipments at all times. Parties contemplating the establishment of industries in the vicinity of Chicago are invited to communicate with the undersigned, who will promptly furnish full information in regard to location, switching rates, car supply, etc. S. Thomas, P. & C. Mgr., Dearborn Station, Chicago.

\$50.00 Reward for First Notice of any Infringement.

Paine-Ellis Grain Drier Co.

53 CHAMBER OF COMMERCE,

Milwaukee, Wis.

To meet the wants of Elevator Men who need a small Drier capable of handling from 1,000 to 1,500 bushels of damp and musty grain in 24 hours, we have put on the market a complete machine which occupies but little room and can be installed at small expense.

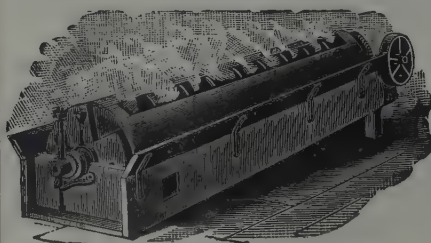
All that is required to operate the Drier is a 10 to 15 H. P. Boiler, and in most cases the exhaust steam from the engine driving the elevator will furnish all the heat necessary, so that about 5 H. P. to operate the fan will be all the additional power required.

The cost of this machine, f. o. b. cars here, is \$650, and we furnish an expert to install the plant free of charge, you simply paying the freight and expense of making connections, and in most cases this will not exceed \$35 to \$50.

The operation and capacity of the Drier are guaranteed, and we ask no pay until this is satisfactorily demonstrated.

PAINE-ELLIS GRAIN DRIER CO.

DAMP WHEAT can be PUT in CONDITION for GRINDING or STORAGE



By using our
**STEAM
DRYER,**

Which is also a successful
Wheat Heater or Temperer
or Dryer for Washed
Wheat or Bran.

It leaves the Wheat in Perfect Condition for the Rolls. Will also dry
Malster's, Brewer's and Distiller's Wet Grain.

Not an Experiment. In successful use 25 years drying
CORN MEAL AND HOMINY,
BREWERS' GRITS AND MEAL,
BUCKWHEAT, RICE AND
ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE AND CLAY AND ORE OF ALL KINDS!

Automatic in operation, requiring no attention. Double
the capacity of any other Dryer sold for same price.

THE CUTLER CO., North Wilbraham, Mass

THE OLD WAY.



For NEW and BEST Way ADDRESS

UNION IRON WORKS,

DECATUR, ILL.,

Manufacturers of the CELEBRATED

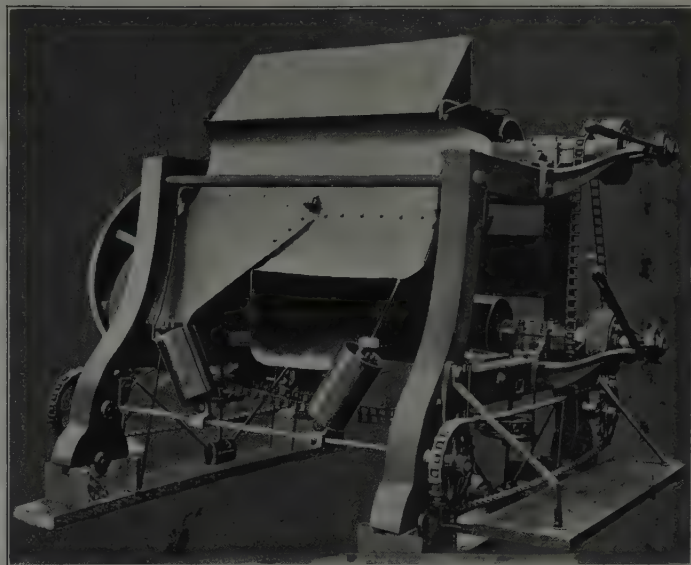
Western Shellers and Cleaners

The "Best in the World."

Elevator Supplies of All Kinds a
Specialty.

We are the Pioneer Elevator Builders of the
West, and claim priority in the building of
Cheap Elevators with increased Conveniences.
Don't BUILD until you get our Plans and Prices.

Write for Catalogue.



Split Discharge, Self-Propelling Tripper, as installed in Hoosac Tunnel Elevators.

Send for Catalogue B6 of

Complete Line of Grain Elevator Machinery and Appliances

AND COMPLETE COMPLEMENT OF

Power Transmission Machinery.

The Most Modern and Successful Machinery for Grain Elevators.

Correspondence Solicited.

DODGE MANUFACTURING CO.,
Mishawaka, Indiana.

BRANCH HOUSES:

NEW YORK, 43-45 Dey St. BOSTON, 137-139 Purchase St. CHICAGO, 166-174 South Clinton St.

THE INCLINE ELEVATOR and DUMP



The farmer furnishes the power. Less than one-half the investment and one-quarter the expense of operating an ordinary elevator. Unexcelled for convenience and economy in handling ear corn as well as shelled grain, etc. It successfully competes with belt elevators. Grain for shipment is handled in the shipping bins while ear corn, oats, etc., are cribbed in the patent storage below.

The Incline Elevator and Dump and plan of building have been greatly improved and are covered by U. S. patents. Write for prices and circulars.

H. KURTZ & SON, GREENFIELD, IOWA.

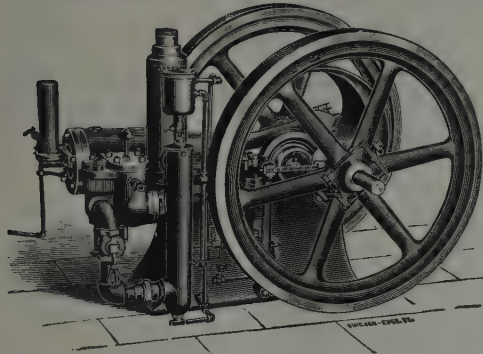
SEEDS

THE ALBERT DICKINSON CO.

Timothy, Clovers, Flax, Hungarian, Millets, Red Top, Blue Grass,
Lawn Grass, Orchard Grass, Bird Seeds, Ensilage Corn,
Pop Corn, Buckwheat, Field Peas, etc.

OFFICES, COR. CLARK & SIXTEENTH STS., CHICAGO, ILL.

"RACINE" Gas and Gasoline Engines.



Especially adapted for operating Grain Elevators.

Both Hot Tube and Electric Spark Ignition with each Engine.

Racine Engines are the result of over ten years' experience in the manufacture of Gas and Gasoline Engines, and embody only such methods and devices as are known to be the best for the purpose.

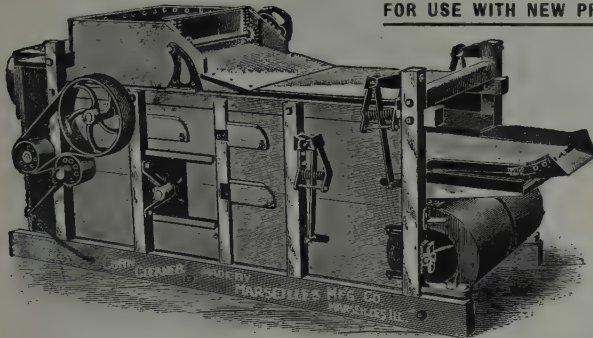
SIMPLE IN CONSTRUCTION AND OPERATION.
EXTREMELY ECONOMICAL.

Write for Catalogue A and Net Prices

RACINE HARDWARE CO.,
RACINE, WIS.

NEW PROCESS CORN CLEANER

FOR USE WITH NEW PROCESS SHELLERS.



Also all other makes of Warehouse Shellings.

Made in Three Sizes.

Capacities—500 to 1,400 bushels per hour, according to size.

Can also be used for cleaning small grains.

The special features of this machine are as follows, viz.: Large capacity, excellent work, occupies only two-thirds the room required by other cleaners of same capacity; has two cleaning fans, one blast and one suction; is dustless; can be knocked down and set up in any part of building; adjustable feed opening, which can be opened or closed off entirely without stopping machine or throwing off the belt; two oil-swinging shoes hinged on patent springs; the grain and screenings all saved; noiseless; runs light; durable. The New Process Shellings and Cleaners make a fine outfit for any house. Ask for circulars. Address

MARSEILLES MFG. CO., Marseilles, Ill.

INSURANCE

ON GRAIN ELEVATORS AND CONTENTS

Is furnished at cost by the
MILLERS' NATIONAL INSURANCE CO.,
of Chicago.

It is a Mutual Company which insures more mills and grain elevators than any other company in the United States.

It has been in business 22 years and its average annual cost for insurance to mutual policy-holders has been about one-half of the board rates of stock companies.

Its cash assets, January 1st, amounted to \$622,367; net cash surplus \$444,968.

The same conservative management which has directed the Company's affairs all through its prosperous existence will be continued.

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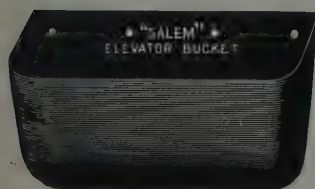
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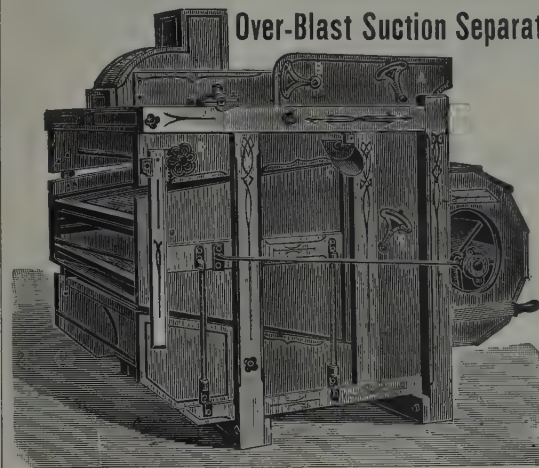
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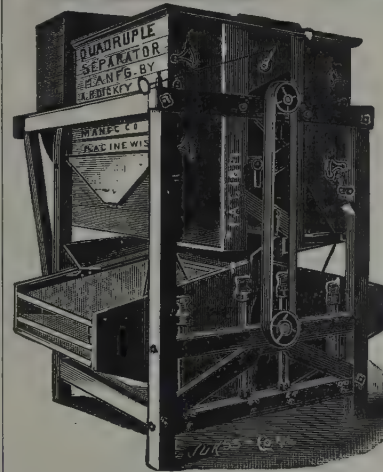


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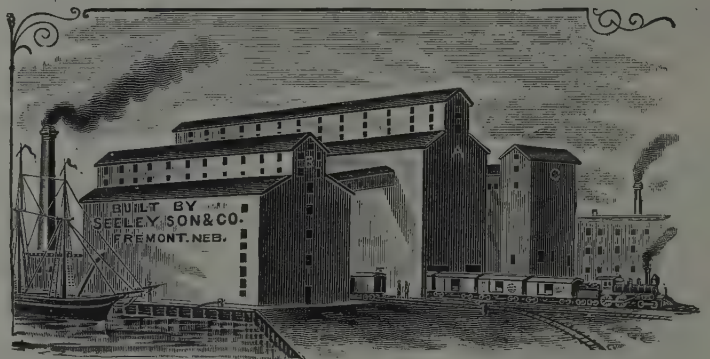
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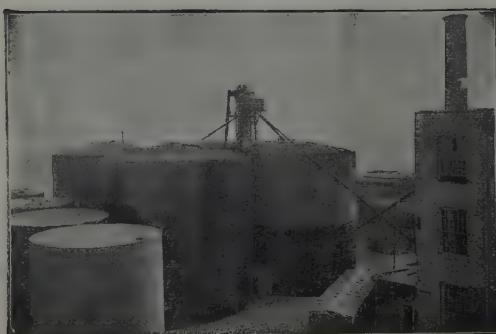
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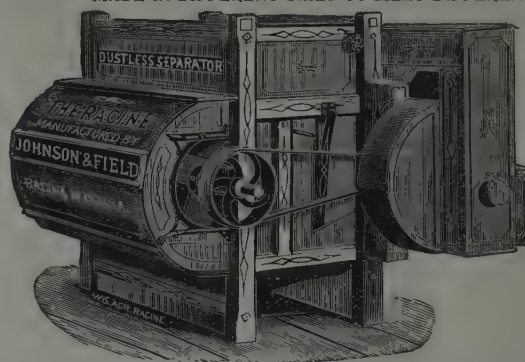
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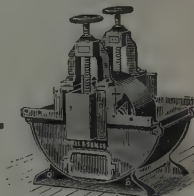
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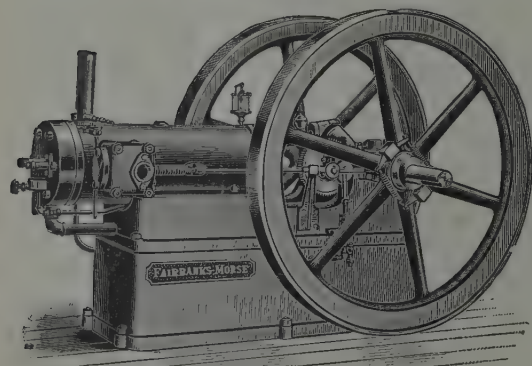
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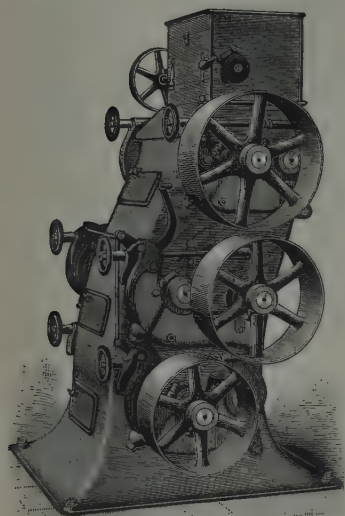
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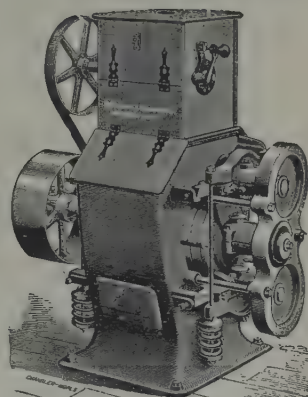


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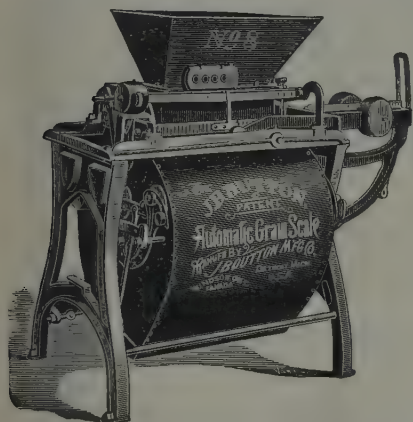
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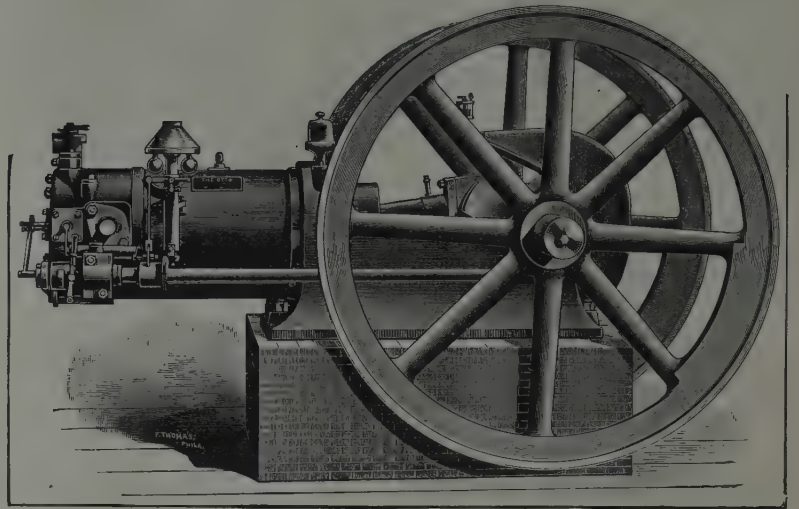
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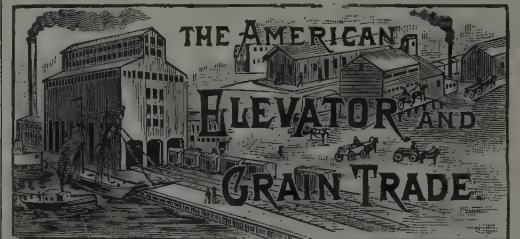
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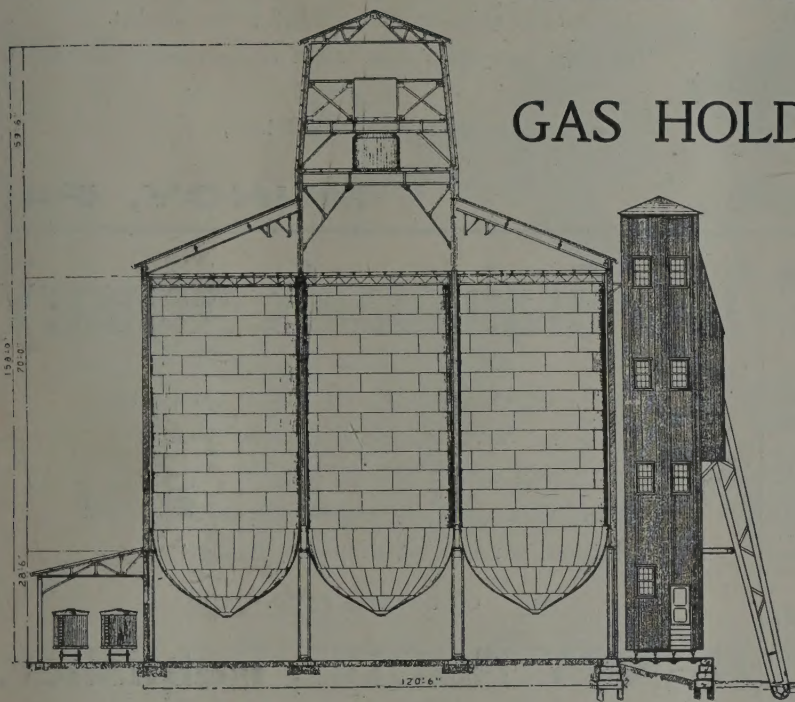
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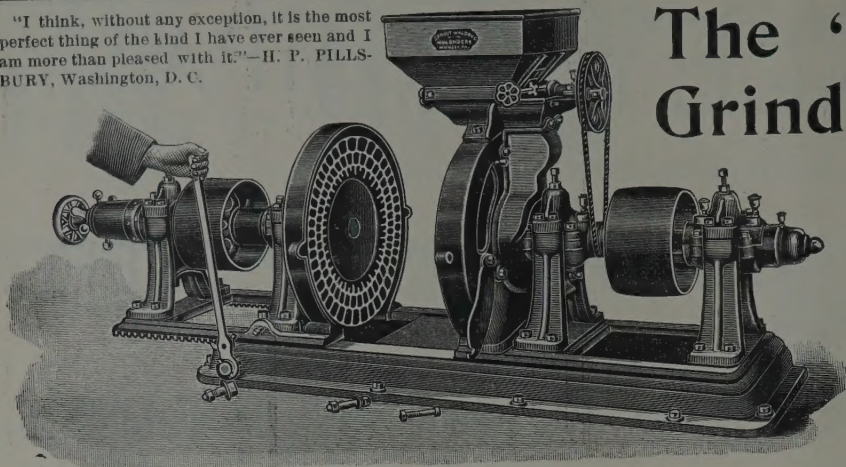
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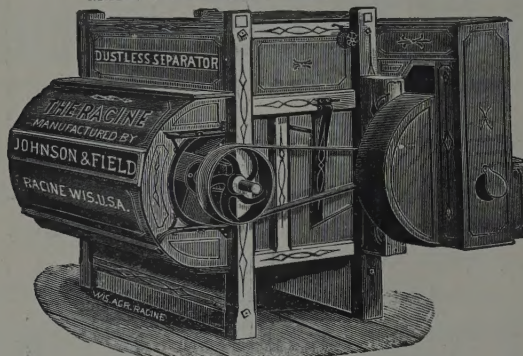
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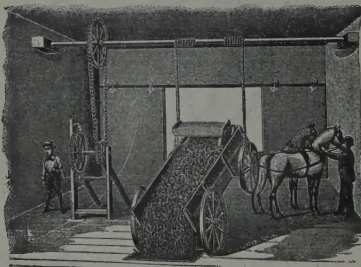
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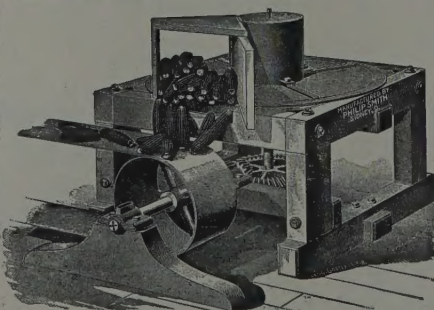


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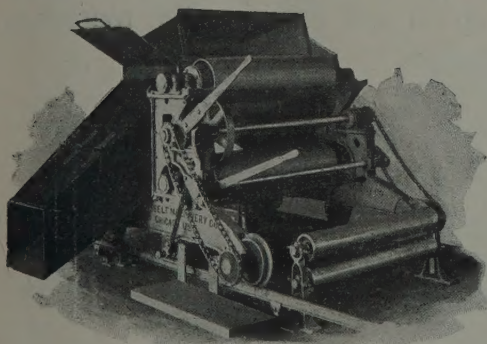
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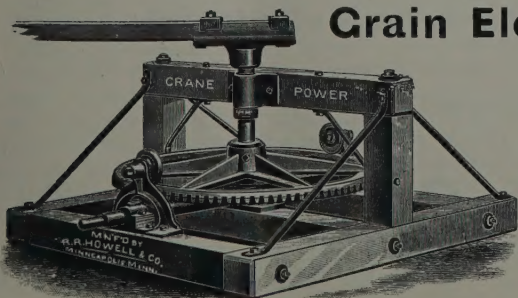


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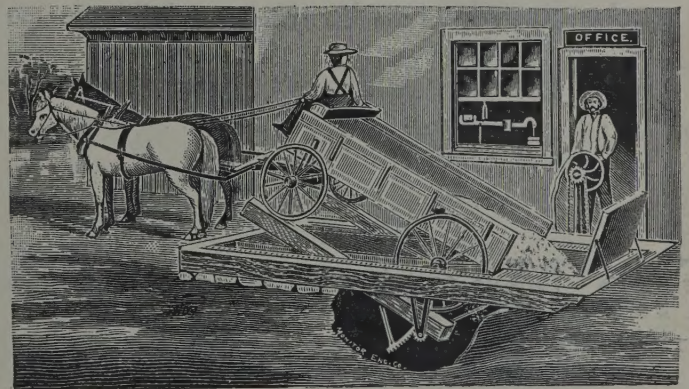
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WINCHESTER, ILL., February 4, 1896.

MESSRS. SAVAGE & LOVE CO., Rockford, Ill.

GENTLEMEN:—Your favor of the 28th ult. received and noted. Last July I put one of your Controllable Wagon Dumps in a Fairbanks, Morse & Co.'s 22-ft. scale, and it has given me entire satisfaction in every respect. In this locality the bulk of grain is as yet handled in sacks, and by tipping the Dump about one-half it makes a nice slant, making it very easy to pull the sacks to back end of wagon, where strings are cut and grain runs out into bin below. Every farmer, without exception, speaks in glowing terms of the merits of this Dump. In unloading loose grain from wagon there is no dump that will equal yours in being easily handled and always under control of operator. No scaring horses, no dropping of wagon and no noise. I consider a grain elevator incomplete without the Savage & Love Controllable Wagon Dumps.

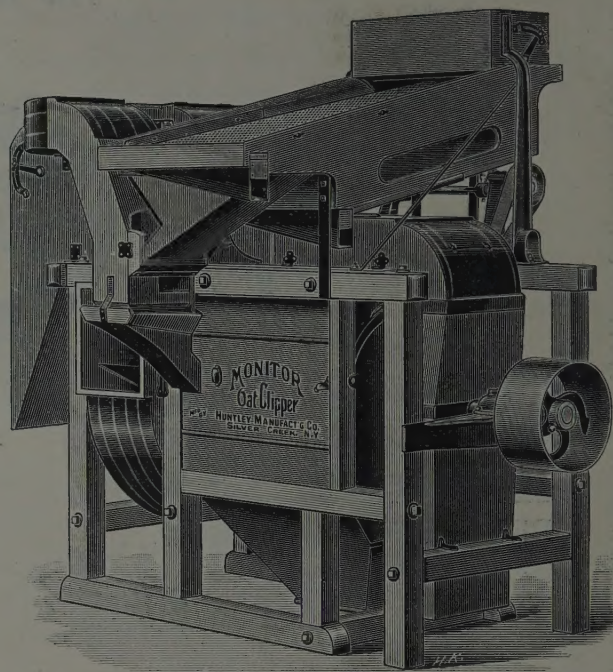
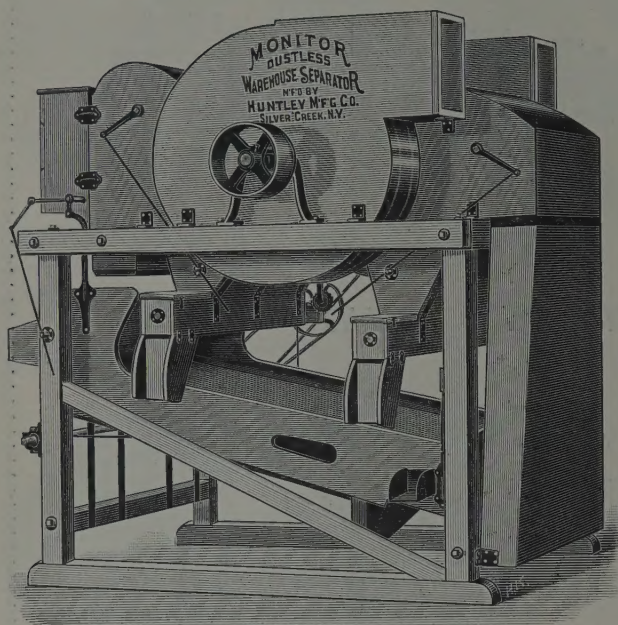
Yours truly,
M. C. WOODWORTH.

MANUFACTURED ONLY BY

THE SAVAGE & LOVE CO., Rockford, Ill.

FAIRBANKS, MORSE & CO., St. Paul, Minn., Northwestern Agents.

Grain Cleaners.—Oat Clippers.



THE MONITORS.

The superiority of the "Monitors" over every other machine for the purpose is conceded by all experts in oat clipping and grain cleaning.

Acknowledged to be the best built, the lightest running and the most economical to use.

If there is a prominent modern elevator in your vicinity, step in and examine the machines. You will find them at work. Then judge for yourself.

The Monitor Smutter

Will clean your smutty wheat, if you have any, and bring it up to grade. You know what this means.

We are leaders in this line, and manufacture only high-grade machines.

We do not offer them in competition with any other make of clippers or cleaners or smutters, so far as price is concerned. It is poor policy to place a machine on the basis of price only.

—WRITE US—

Huntley Mfg. Co., Silver Creek, N. Y.